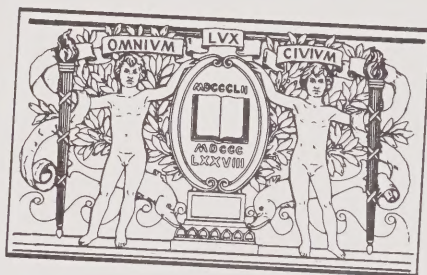


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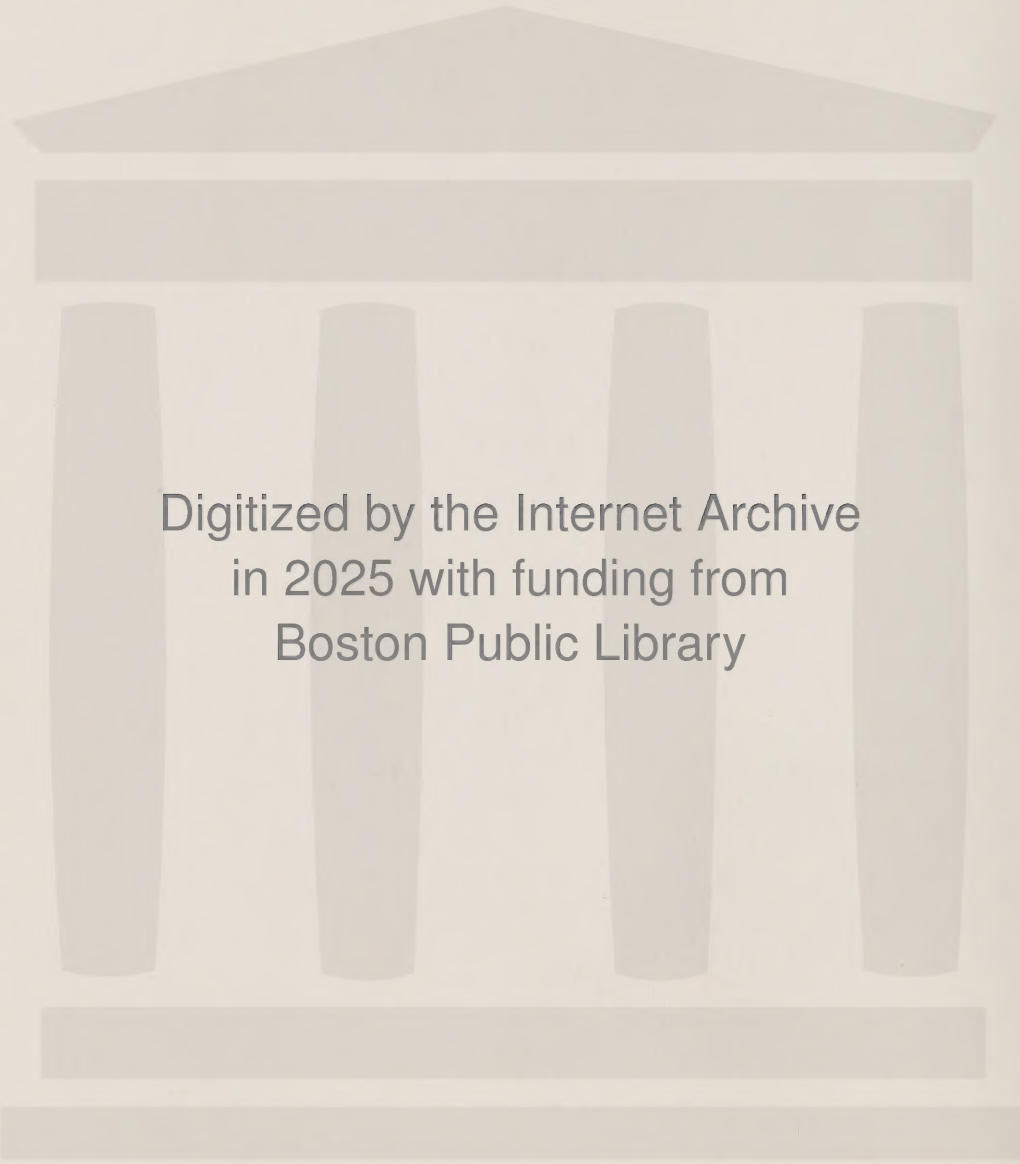
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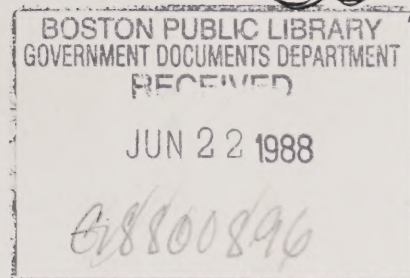


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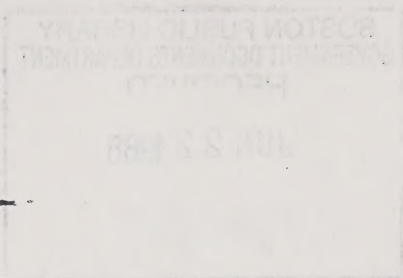
THE ECONOMIES OF BOSTON AND 34 OTHER LARGE CITIES
IN THE YEAR 2000

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April, 1988
Preliminary

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Abstract

This report analyzes employment, population and income projections to the year 2000 for the Boston metropolitan area and the metropolitan areas of 34 other large cities. The projections are published by the Bureau of Economic Analysis of the Department of Commerce. The analysis focuses primarily on employment change and on the distribution of economic activity in each metropolitan area and across areas. The report documents the projected growth of employment in a range of service producing industries and the decline of manufacturing employment. The Boston metropolitan area is projected to benefit both from growth in services employment and from continued activity in durable goods manufacturing. These activities will provide the Boston area with a rather diversified economic base.

This report contains information regarding the results of the investigation conducted by the Department of the Interior, Bureau of Land Management, in the area of the proposed project. The investigation was conducted in accordance with the provisions of the National Environmental Policy Act of 1969, as amended, and the regulations promulgated thereunder. The results of the investigation are set forth in this report, which is being submitted to the Department of the Interior for its review and consideration. The report contains information regarding the proposed project, the environmental impacts of the project, and the measures that will be taken to avoid, minimize, and compensate for the impacts of the project. The report also contains information regarding the public participation process, which was conducted in accordance with the provisions of the National Environmental Policy Act of 1969, as amended, and the regulations promulgated thereunder. The results of the public participation process are set forth in this report, which is being submitted to the Department of the Interior for its review and consideration. The report contains information regarding the proposed project, the environmental impacts of the project, and the measures that will be taken to avoid, minimize, and compensate for the impacts of the project. The report also contains information regarding the public participation process, which was conducted in accordance with the provisions of the National Environmental Policy Act of 1969, as amended, and the regulations promulgated thereunder. The results of the public participation process are set forth in this report, which is being submitted to the Department of the Interior for its review and consideration.

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INTRODUCTION

This report examines the economies of the metropolitan areas of Boston and 34 other large cities between 1983 and 2000. It extends the analysis conducted in a report on historical trends in these cities between 1969 and 1984 ¹, and relies on projections to the year 2000 of employment, population and earnings by broad industry category, which are produced by the U.S. Department of Commerce, Bureau of Economic Analysis.

The OBERS² projections are computed only for metropolitan areas and not separately for their central city counties. They therefore provide information about the future of aggregate local economies in and surrounding cities. As such, they do not offer a precise indication of the economies of the individual cities. Nevertheless, metropolitan areas are useful units of comparison because their boundaries are drawn to reflect economic functions and economic linkages between central cities and the areas around them.

The OBERS projections are generated for the nation, states and metropolitan statistical areas. This report analyses projections for the metropolitan areas of Boston³ and 34 other

¹ The Economies of Boston and 34 Large Cities, Francoise J. Carre and Jeff Brown, BRA Policy Development and Research, November 1987.

² The name stands for Office of Business Economics and Economic Research Service, older names of federal offices.

³ The metropolitan area for Boston is the New England Consolidated Metropolitan Area (NECMA) which includes Norfolk, Suffolk, Middlesex, Essex and Plymouth counties.

large cities also studied in the historical report mentioned above. These metropolitan areas are not necessarily among the largest in the nation; they are the areas surrounding the largest cities and have been selected on that basis.

Generally speaking, the projections used in this report are based on an extension of past economic relationships which gives more weight to the recent decades than to the more distant ones. The projections also assume no major national policy changes. They include the anticipated effects of technological changes at the level of national projections only. The projections are constructed with a "step down" approach based on the premise that estimates for larger geographic aggregates are generally more accurate than the same type of information for smaller areas. Thus, national projections are developed first, then distributed among states to arrive at state-level projections.⁴ In turn, state-level projections are distributed among metropolitan areas in each state. Finally, and for verification, the sum of distributed projections must equal the higher level aggregate; area projections must add to the state projection and state projections must add to the national aggregate. A more detailed description of the method for the projections is included in the Appendix.

This report relies primarily on employment figures, rather than earnings figures, as indicators of economic activity.

⁴ The national projections are done by the Bureau of Labor Statistics of the Department of Labor.

Earnings figures provide an indication of the size of a metropolitan market and of the distribution of economic activity across industrial sectors. They are, however, less comparable across metropolitan areas than employment figures because they are more dependent on the level of wages in each area. A brief analysis of per capita personal income figures is included to complement that of employment patterns.

The purposes for this report are to determine the metropolitan areas projected to have fastest growth and those with lowest growth in population, employment and income, to rank areas on employment growth, to observe specialization or diversification of economic activity across areas, to compare the growth of goods producing sectors to that of service producing sectors and to compare Boston's economy to that of other metropolitan areas.

The projected feature of the Boston economy which stands out and may make the area resistant to declines in specific industries is its mixed specialization in the fast growing segments of the manufacturing sector and in service producing industries which will grow in the national economy as well. The metropolitan economy might likely be only susceptible to nationwide, or worldwide, recessions.

The remainder of this report contains five sections. Section One reports summary findings, Section Two discusses location quotients and the role of service producing industries, Section Three analyzes employment trends, Section Four compares ratios of

employment to population and Section Five ranks the metro areas
on per capita personal income.

SECTION ONE. SUMMARY FINDINGS

The national economic growth of the 1980's is projected to continue to the year 2000. From 1983 to 2000, national total non-farm employment will grow by 31,596,000 jobs. This corresponds to a 30.68 percent growth and an average annual rate of 1.59 percent. In the national economy, as in that of most metropolitan areas in the study, this growth will not be evenly distributed throughout the period. Between 1983 and 1990, the average annual growth rate of total non-farm employment will be 2.10 percent. In the later period, 1990-2000, the average annual rate will be lower, reaching 1.22 percent. This pattern of faster growth in the earlier part of the period and slower growth in the later part is replicated in the Boston metro area and most other metro areas in the study. Also, all metro areas in the study will experience growth, rather than decline, in total non-farm employment over the 1983-2000 period.

For the entire period 1983-2000, the Finance sector presents an interesting aggregate pattern of employment change. Only 11 metro areas out of 35 have annual rates of Finance employment growth which are above the national growth trend. It appears that Finance employment is projected to grow faster in metropolitan areas of cities which are not among the nation's largest, and in non-metropolitan areas. The employment growth rates of all other sectors for all metropolitan areas are evenly distributed above and below the national trend.

Some general information is useful before presenting details on economic performance in the metropolitan areas under consideration. By the year 2000, the five largest metropolitan areas will be Los Angeles with 8,870,200 persons, New York City with 8,433,200 persons, Chicago with 6,130,000 persons, Philadelphia with 4,914,200 persons and Boston with 4,301,300 persons. They will also be those with the highest total employment. Los Angeles will have 5,004,300 jobs, New York 4,813,900 jobs, Chicago 3,528,100 jobs, Boston 2,784,700 job and Philadelphia 2,540,900 jobs.

The largest metro areas in the study will not be among those experiencing the fastest annual growth rates of employment over the period 1983 to 2000 and a number of them will be among those slowest growing. In terms of annual growth rates of non-farm employment, metropolitan Phoenix will grow by 3.43 percent, San Jose by 2.70 percent, San Diego by 2.44 percent, Houston by 2.40 percent, and Denver by 2.38 percent. The slowest growing metro areas will be Cleveland with 0.69 percent, Pittsburgh with 0.78 percent, New York with 0.79 percent, Detroit with 0.85 percent and Baltimore with 0.91 percent. While the largest metro areas will not grow fastest, a number of them will still be among those experiencing the largest increase in total employment since their jobs base is so large. Los Angeles will gain a total of 1,006,000 jobs, Houston 786,000 jobs, Boston 720,000 jobs, New York 606,000 jobs and Phoenix 598,500 jobs. Metro areas with the smallest jobs gains will be El Paso with 57,000 jobs, Buffalo

with 72,800 jobs, Memphis with 100,800 jobs, Cleveland with 111,400 jobs and Jacksonville with 117,200 jobs.

Assessing Future Economic Performance

This report relies almost entirely on the subset of OBERS projections concerning employment levels. The primary indicator of economic performance used in this study are therefore rates of growth of employment. They provide a partial picture of the economic well-being of a metro area. They identify areas of high job growth, and areas with a heavy specialization in some sectors. This study does not include, for instance, projected rates of unemployment, or shares of full-time and part-time employment, which would complement the indications provided by employment growth rates. The growth of the labor supply in any area will influence greatly its unemployment situation. Population growth is an indication of the potential growth of the labor supply; table 1 provides levels and rates of population growth for all metro areas in the study. Partial information can also be obtained from per capita personal income figures as well.

The Boston Economy in Comparative Perspective

The U.S. Department of Commerce provided general rankings of the nation's 55 largest Metropolitan Statistical Areas on selected demographic and economic indicators for 1983 and 2000.⁵ These 55 metro areas are those whose population is projected to exceed 1 million by the year 2000. From 1983 to 2000, the

⁵ U.S. Department of Commerce, Bureau of Economic Analysis, News, December 3, 1985.

Table 1. Projected Population for all Metropolitan Areas, 1983-2000

	(in thousands)		% Change 1983-2000	
	2000	1990	1983	
Atlanta	3,031.5	2,656.9	2,305.0	31.52
Baltimore	2,390.0	2,311.3	2,232.2	7.07
BOSTON	4,301.3	3,936.8	3,673.4	17.09
Buffalo	1,045.8	1,016.0	1,001.8	4.39
Chicago	6,130.6	6,089.3	6,119.0	0.19
Cincinnati	1,435.0	1,416.1	1,404.5	2.17
Cleveland	1,723.2	1,781.6	1,877.5	-8.22
Columbus	1,411.4	1,333.2	1,262.6	11.79
Dallas	2,712.3	2,419.3	2,170.2	24.98
Denver	2,108.5	1,786.1	1,561.5	35.03
Detroit	4,265.4	4,303.4	4,347.4	-1.89
El Paso	590.4	542.5	510.5	15.65
Fort Worth	1,371.6	1,226.4	1,095.8	25.17
Houston	4,262.1	3,692.1	3,161.4	34.82
Indianapolis	1,228.4	1,201.5	1,182.0	3.93
Jacksonville	942.4	848.5	772.8	21.95
Kansas City	1,599.7	1,531.7	1,464.4	9.24
Los Angeles	8,870.2	8,251.3	7,818.3	13.45
Memphis	1,007.3	957.0	930.3	8.28
Milwaukee	1,424.7	1,403.1	1,397.3	1.96
Minneapolis	2,688.6	2,420.2	2,207.9	21.77
Nashville	1,034.7	942.9	878.0	17.85
New Orleans	1,408.3	1,349.4	1,315.7	7.04
New York	8,433.2	8,253.8	8,290.6	1.72
Oklahoma City	1,138.4	1,038.9	957.1	18.94
Philadelphia	4,914.2	4,835.0	4,760.0	3.24
Phoenix	2,573.0	2,070.9	1,663.8	54.65
Pittsburgh	2,163.2	2,187.1	2,197.9	-1.58
St. Louis	2,537.5	2,473.7	2,396.5	5.88
San Antonio	1,389.7	1,272.6	1,168.8	18.90
San Diego	2,652.3	2,325.5	2,015.2	31.61
San Francisco	1,633.5	1,556.4	1,517.9	7.62
San Jose	1,716.7	1,531.6	1,359.7	26.26
Seattle	2,163.8	1,906.4	1,677.4	29.00
Washington, DC	3,948.0	3,641.3	3,369.6	17.17
UNITED STATES	267,464.0	249,203.0	233,975.0	14.31

metropolitan Boston population is projected to increase by 628,000 persons from 3,673,000 to 4,301,000. This will correspond to a 17.1 percent increase. Among the 55 metro areas, Boston's relative ranking in terms of population size will improve from 6th in 1983 to 5th in 2000. While being among the largest metro areas in the nation, Boston will not be among the fastest growing in terms of population. Its rate of population growth for 1983-2000 will rank 29th among 55 metro areas.

The Boston metropolitan area's total employment, farm and non-farm, of 2,784,700 jobs by 2000 represents an increase of 718,800 jobs from 1983. The metro area's relative ranking among 55 metro areas on total employment will improve from 5th in 1983 to 4th in 2000.

Additionally, the Boston metropolitan area will witness improvements in its relative position in terms of income. An increase in per capita personal income from \$14,296 in 1983 to \$19,049 in 2000 (1983 dollars) will improve Boston's rank from 15th out of 55 in 1983 to 11th in 2000. In terms of total personal income, the metro area will rank 6th in 2000 as compared to 7th in 1983. Thus, all of these indicators project that the Boston metropolitan area will have improved its relative position among the nation's largest metro areas.

The rest of this section discusses the Boston metropolitan economy in comparison to those of the 34 other metro areas in the study. From 1983 to 2000, the Boston metropolitan area will witness an increase of total non-farm employment amounting to

720,200 jobs.⁶ This increase corresponds to a total percentage growth of 34.97 percent, and an average annual growth rate of 1.78 percent. The average annual growth rate is above the national trend for the same period. The Boston area will be the 4th highest metro area above the U.S. trend in terms of employment growth. Among the 35 metro areas in the study, Boston's average annual rate of non-farm employment growth will rank 13th.

The ratio of employment to population provides an indication of the concentration of employment in an area; it is a reflection of the extent to which a metro area functions as an employment center for its region. This ratio will grow in the Boston metro area and will also grow in the national economy. Between 1983 and 2000, Boston's ratio will experience a 14-point jump from 56.21 percent to 70.74 percent. In comparison, the U.S. economy will experience a 10-point jump in its employment to population ratio from 45.68 percent to 55.51 percent. The ratio of employment to population will grow in the U.S. economy because of changes in the demographic composition of the population and of increased labor force participation on the part of some demographic groups. The position of the Boston area relative to other metros in terms of this ratio will not change from 1983 to 2000; the metro area will continue to rank 5th among 35 metros.

⁶ It was noted above that total employment, farm and non-farm, increased by 718,800 over the period, while non-farm employment increased by 720,200 jobs. This implies that farm employment declined in the metro area.

By the year 2000, the Boston metropolitan area will have sustained its specialization relative to the national economy in Manufacturing, Wholesale Trade, Finance, and Services to businesses and individuals. Perhaps most striking is the fact that Boston which had been known for losing its traditional manufacturing base through the fifties, sixties and seventies, is projected to have an increased relative specialization in manufacturing by the year 2000, a trend already observed in the early eighties.⁷

Looking at the composition of Boston's employment in 2000 as compared to 1983 provides another view of the evolution of the specialization of the metropolitan economy. Table 2 breaks down total non-farm employment across major industrial sectors. Manufacturing will constitute a somewhat greater share of total non-farm employment in 2000 of 20.79 percent, than in 1983, with 19.94 percent. The source of this growth in total Manufacturing's job share will be due to Durable Goods Manufacturing which will increase from 14.02 percent in 1983 to 16.40 percent in 2000. Nondurable Goods Manufacturing, on the other hand, will decrease as a share of employment from 5.91 percent to 4.39 percent. The metropolitan economy will move away from nondurable goods production such as light assembly work and food processing, and towards the production of equipment and

⁷ Actual figures for the whole state, and not the metro area, indicate a slowdown of overall manufacturing activity in 1987. It is too early to tell whether this actual trend should affect metropolitan manufacturing employment levels and should have been anticipated by the OBERS projections.

Table 2. Percentage Breakdown of Metropolitan Boston Total Non-farm Employment by Industrial Sector, 2000 and 1983

	2000 %	1983 %
Agricultural Services, For., Fish. and other	0.65	NA
Mining	0.04	0.04
Construction	3.86	3.62
Manufacturing	20.79	19.94
Nondurable Goods	4.39	5.91
Durable Goods	16.40	14.02
Transportation and Public Utilities	4.46	4.47
Wholesale Trade	5.26	5.59
Retail Trade	15.66	16.05
Finance, Insurance and Real Estate */	7.35	6.59
Services	31.48	29.39
Government and Government Services	10.43	13.51
Federal, Civilian	1.67	2.18
Federal, Military	1.10	1.48
State and Local	7.66	9.85

*/ 1983 Finance employment for the Boston area is estimated. See report text.

durable consumer goods, an indication of the area's continued specialization in technology intensive production. In fact, the metropolitan area will be less specialized in non-durable goods production than the national economy as a whole.

Manufacturing will contribute to Boston employment growth much more than it will to the growth of the national economy. The sector as a whole will account for 23.24 percent of the growth of total non-farm employment in metropolitan Boston from 1983 to 2000. This contribution is much higher than that of manufacturing to U.S. employment growth which amounts to 14.24 percent of the growth of total non-farm employment.

Among service industries, the Finance sector will increase slightly as a share of employment from 6.59 percent to 7.35 percent. This sector will account for 9.54 percent of the growth of Boston total non-farm employment as compared to 8.47 percent for the nation.

The relative specialization of Boston in Services to businesses and individuals will have decreased by the year 2000, as indicated by its location quotient⁸. In 2000, the Boston metro area will remain specialized in the Services sector, relative to the national economy, but to a lesser degree than in 1983. This slight reduction in relative specialization will

⁸ Definition of the location quotient: the location quotient for Services, for example, in the Boston area is the share of Services employment in the Boston metro area total employment in relation to the share of U.S. Services employment in total U.S. employment. The location quotient for an industry is an indicator of the specialization of an area relative to the specialization of the U.S. economy in that particular industry.

occur because the annual growth rate of the Services sector will be close to, but lower than, the U.S. annual growth trend in services over the period 1983-2000. Even if it is projected to grow at a slower rate, the Services sector's share of metropolitan Boston total employment nevertheless will increase over the period from 29.39 percent of total non-farm employment in 1983 to 31.48 percent in 2000. This share will remain higher than the equivalent one for the U.S. economy. Moreover, the Services sector will account for 37.48 percent of the growth of total non-farm employment in Boston, a higher figure than the 35.99 percent of total non-farm employment growth which is accounted for by Services in the national economy.

In spite of experiencing a growth of the Services sector which is slightly below the national trend, the Boston metropolitan area will continue in 2000 to be an area with a large share of its employment in service industries, broadly defined, and including Finance, Services, and Transportation. In 2000, these sectors will account for 43.2 percent of Boston's total employment, up from 41.7 percent in 1990 and 40.3 percent in 1983. By 2000, Boston will rank 9th among all 35 metro areas under consideration in terms of share of employment accounted for by the broad range of service industries. As with most metro areas in the study (29 out of 35), Boston will have a service industries share of total employment higher than the same ratio for the U.S.

Overall, Boston metropolitan non-farm employment will grow faster than the U.S. employment level from 1983 to 2000. Boston employment will also grow faster than the U.S. economy in most major industrial sectors except for Retail Trade and for Services, as was mentioned above. By 2000, the Boston metropolitan economy will consist of a mix of service producing activities, particularly services to businesses and to individuals, and of manufacturing activity, particularly in the Durable Goods sector. Such a mix of diverse economic activities makes the Boston metro area stand out among large metros which generally specialize in service production or goods production, but rarely in both activities.

The Boston metropolitan area may turn out to have the "best of both worlds" in terms of having a mixed specialization in the fast growing segments of the manufacturing sector, and in service industries which are growing nationwide as well. It is likely that metropolitan Boston will be fairly sheltered from declines in an individual industry. Its economy is more likely to be susceptible only to nationwide, or world-wide recessions.

Other metropolitan areas specializing in service industries

Among the 35 metro areas in the study, 29 will have shares of total employment in service industries -Finance, Services, and Transportation- which are above the equivalent share for the national economy. This is due to the fact that service activities tend to concentrate in urban areas. By 2000, eight metro areas will have a share of their employment in service

industries, broadly defined, which is greater than that of Boston. They are New York City, San Francisco, Washington, D.C., Chicago, New Orleans, Denver, Los Angeles and Milwaukee. How will they have fared in terms of overall employment growth, and relative to the national trend and to other metro areas?

Of these metro areas, only Denver, along with Boston, is projected to have a rate of growth of total non-farm employment which is above the national trend. Washington, D.C. and San Francisco will have rates close to the national trend, while New York City will have the third lowest rate of total non-farm employment growth among the 35 metro areas. In spite of low growth rates, the New York metro area will maintain a heavy specialization, and a large job base, in Finance, Services, Wholesale Trade and Transportation.

The metro areas specialized in services and whose rates of total employment are projected to be below the national trend, also have below-nationwide rates of Finance and Transportation employment growth. Six also have rates of Service employment growth which are below the national trend. While these metro areas will retain high shares of total employment in service industries, their service employment base will not grow as fast as that of the U.S. economy as a whole, that is those of other smaller metro areas and of non-metropolitan areas. During the period 1983-2000, the economic base of areas outside the large service oriented metro areas will experience a shift towards service producing industries, a shift which the economies of

metro areas like San Francisco experienced much earlier in time. Hence, metro areas now specialized in service production will continue to be so. The national economy, however, will increasingly become specialized in the same service activities. In spite of high rates of growth, the national economy will not resemble that of a service metro area like that of New York City or San Francisco.

Finally, as was noted earlier, few metro areas in the study will experience rates of growth of Finance employment which are higher than the national trend. Among service-oriented metro areas, only Boston and Denver will exceed the same national trend. This pattern may hint at an increased decentralization of Finance employment away from large metropolitan areas. While service-oriented metro areas will retain Finance employment, the growth of such employment will increasingly occur outside large metro areas, that is in smaller metro areas and in non-metropolitan areas.

The Relative role of Manufacturing and of service producing activities in old and new industrial centers

Projections for the period 1983-2000, replicate patterns that were salient since the mid seventies. They consist of rapid growth in new manufacturing centers and slow growth, and even decline, in rust-belt metro areas.

Most noticeable, Manufacturing is the only sector projected to have employment declines for the whole period 1983-2000, in some metro areas. The same pattern is true for the two intermediate time periods. 1983-1990 and 1990-2000. Between 1983

and 2000, the New York metropolitan area is projected to have an annual rate of change of Manufacturing employment of -0.68 percent. For the whole time period, it is the only metro area with an employment decline. The picture changes slightly for the two intermediate time periods. During the early period, 1983-1990, New York will experience a decline of Manufacturing jobs of -0.45 percent. During the latter period, 1990-2000, several metro areas will have declines in manufacturing employment; almost all are old industrial centers which started losing manufacturing jobs in large numbers in the late seventies. They include: New York, Cleveland, Buffalo, Chicago, Pittsburgh, Philadelphia and Detroit. By 2000, Detroit and Cleveland will retain manufacturing location quotients among the highest in spite of having little growth, and even declines, in manufacturing employment. By 2000, Buffalo, Pittsburgh and Philadelphia will have lost their relative specialization in manufacturing activities. The trend of Manufacturing slowdown will worsen during 1990-2000, a time period during which total employment will also grow slower across all metro areas, and for most sectors.

A number of the new industrial centers which emerged in the seventies are projected to have continued manufacturing job growth through 2000. Boston, an old manufacturing center having gone through significant decline from the 1950's through the 1970's, will have re-joined the ranks of the new manufacturing centers. Among these, metro areas which will have higher rates

of manufacturing job growth will tend to display a specialization in the Durable Goods sector of Manufacturing. This is true in 1983 and 2000 for Boston, San Jose, Minneapolis and Seattle but not true for El Paso, which is heavily specialized in Nondurable Goods production. Nondurable Goods production entails an array of activities ranging from light assembly, such as garments and leather, to petroleum refining. Among manufacturing centers, metro areas which will have the lowest rates of growth in total manufacturing employment, do not display a specific pattern of specialization both in 1983 and 2000. Some like Detroit are solely specialized in Durable Goods manufacturing while others, like Chicago and St. Louis, specialize approximately to the same degree in Durable and Nondurable Goods production.

Service producing activities will contribute to the growth of old and new manufacturing centers in different ways. Some old manufacturing centers will have maintained, by 2000, shares of employment in service producing industries which are higher than for the national economy. This will be true for Milwaukee with 43.3 percent of non-farm employment in service industries, Philadelphia with 42.9 percent, Pittsburgh with 42.3 percent, and Buffalo with 40.4 percent. Detroit will, however, have a share of 38.4 percent which is barely above the national share of 37.1 percent. Yet, the heavier weight of service producing activities in the economies of these metropolitan areas will be primarily due to the increased weight of Services to individuals and to businesses, and not to an increased preponderance of Finance or

Transportation employment. Several of these areas will experience a decreased specialization in Finance activity in particular. The pattern for more recent manufacturing centers is more mixed with a number of metro areas such as Dallas, Houston and Seattle, displaying a moderate but declining degree of specialization in Finance activities, while most have a steady but slight specialization in services. By 2000, the share of non-farm employment in service producing industries as a group for most of these metro areas will be slightly above the equivalent national share. Notable exceptions are San Jose, with a 36.5 percent share, and Forth Worth, with a 34.9 percent share, compared to a national share of 37.1 percent in 2000. Possibly these two metro areas, because of geographic proximity, rely on services provided by two service-specialty areas, San Francisco and Dallas.

Areas of Heavy Mining Activity

The extraction and mining of petroleum, natural gas, coal, metals and non-metals will remain very concentrated in a few areas by the year 2000, as it was in previous years.⁹ Only 6 metro areas out of 35 will display a specialization in Mining. Of these, three -Houston, Oklahoma City and Denver- will have location quotients above 3, indicating a heavy concentration of

⁹ While data on the Mining sector for 1983 are undisclosed in the OBERS series for a large number of metro areas, location quotients for 1984 which are based on another series, are reported in the historical report by Carre and Brown, BRA, November 1987. They indicate for 1984, the same pattern of geographic concentration as that projected for 2000.

mining activity.¹⁰ Among the other three metro areas, only Dallas will display an increased degree of specialization in Mining in 2000; the other two areas, Fort Worth and New Orleans, will remain specialized in Mining but to a lesser degree than in the early eighties.¹¹

These three metro areas will retain such high relative specialization in mining activity by having annual growth rates of mining employment of 2.67 percent for Denver (14,800 jobs), 2.42 percent for Oklahoma City (11,600 jobs), and 2.33 percent for Houston (46,100 jobs). These annual rates of growth are moderate, particularly as compared to the growth of service producing industries, but sufficient to maintain a specialization in extraction and mining which is much higher than in most other large metropolitan areas.

Areas with a concentration of mining activity are also projected to fare well in terms of total non-farm employment growth. Five areas, Houston, Denver, Fort Worth, Dallas, and Oklahoma City are projected to have annual rates of growth of total non-farm employment which are above the national trend. Only New Orleans will not. Among the 35 metro areas in the study it will rank 10th below the national trend.

¹⁰ A location quotient of 1 for a metro area indicates that mining activity is as great a share of total employment in that area as it is in the national economy.

¹¹ While a 1983 figure is undisclosed in the OBERS series for Fort Worth, a 1984 figure from another historical series indicates a higher degree of specialization in Mining than for 2000. See Carre and Brown, BRA, 1987.

SECTION TWO. INDUSTRIAL STRUCTURE

Location Quotients

Location quotients are an indication of the industrial mix of a metropolitan area as compared to the industrial mix of the national economy. Tables 3A to 3AI provide location quotients for all industrial sectors for each metropolitan area.

Location quotients for Boston. The location quotients for Boston for the year 2000 indicate a continued relative specialization in Finance, Services, Manufacturing and Wholesale Trade.¹² The location quotients for Wholesale Trade and Services will show a decline while Manufacturing and Finance will increase from 1983 to 2000. In fact, the relative specialization of the Boston metro area in Finance and Manufacturing will increase faster than in other metropolitan areas. The Boston manufacturing location quotient ranked 10th highest in 1983 and will rank 6th highest in 2000. Similarly, the Finance location

¹² In this data series, the 1983 employment figure for the Finance, Insurance and Real Estate sector in the Boston metro area is undisclosed, while it is used for the 2000 projection. For completeness, we used an estimate of 1983 Finance employment based on an employment series released after the formulation of the OBERS and named: U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economic Measurement Division, "Regional Economic Information System (REIS) Database, Boston NECMA, April 1986." The method used to construct the estimate assumes that the ratio of the OBERS figure to the REIS figure is the same for two years that are close in time. So, to estimate the 1983 OBERS level for the Finance sector in Boston we assume that:

$$\begin{array}{rcl} 1978 \text{ OBERS} & & 1983 \text{ OBERS} \\ \text{-----} & - & \text{-----} \\ 1978 \text{ REIS} & & 1983 \text{ REIS} \end{array} = R$$

Thus, the estimated 1983 OBERS = $R \times (1983 \text{ REIS})$

quotient ranked 18th highest in 1983 and will rank 17th highest in 2000 (see tables 4A to 4F).

Location quotients for other metropolitan areas. Tables 3A to 3AI provide location quotients for all industrial sectors for each metropolitan area. Tables 4A to 4F provide relative rankings of metropolitan areas according to their location quotients for selected industrial sectors.

Finance (table 4A). By 2000, New York City and San Francisco will continue to have location quotients for the Finance sector substantially higher than those of all other metro areas. Metro areas which had also shown increases in their specialization in Finance from 1969 to 1984 continue to show improvements in their relative ranking in 2000. San Diego and Indianapolis display marked improvements in their ranking from 1983 to 2000.

Manufacturing (table 4B). By 2000, the metro area with the highest location quotient is San Jose while that with the lowest is Washington, DC. Manufacturing growth will not affect all metro areas similarly. The highest location quotient for manufacturing will be larger than in 1983, and the lowest will be smaller than in 1983. The disparity of degree of manufacturing activity among metropolitan areas in the study will have grown.

The relative ranking of metropolitan areas will have changed in a few instances. Most noticeable, El Paso will have gone from being 16th highest in 1983 to 4th highest in 2000. Chicago will have gone from 9th highest in 1983 to 14th highest in 2000. A

number of traditional manufacturing areas will have lost further their relative specialization in manufacturing, a trend in process since the 1970s. For instance, Philadelphia and Pittsburgh, whose relative ranking had declined between 1969 and 1984 as shown in the historical report, will have an even lower relative ranking by 2000. Detroit will be among the few metro areas well-known for their traditional manufacturing activity to continue to display a high relative specialization in manufacturing by 2000.

Mining (table 4C). Mining activity will remain heavily concentrated in a few metropolitan areas; Houston, Oklahoma City, Denver, Dallas, and New Orleans. These areas will continue to have very high Mining location quotients. Denver, New Orleans, Pittsburgh and San Antonio will experience declines in their mining location quotient.

Services (table 4E). The highest and lowest location quotients for the services sector are almost identical in 1983 and 2000 indicating that the services sector share of employment in all metro areas in the study will grow apace with the national share of the industry. Relative rankings among metro areas are projected to change somewhat from 1983 to 2000. New York City, Washington, DC and San Francisco will remain the metro areas with highest location quotients in services. The Milwaukee and Chicago metro areas show an improvement in their relative ranking. Pittsburgh, St. Louis, San Jose, Baltimore, Phoenix, and

Table 3A. Employment Location Quotient, Export(+) and Import(-) Roles by Sector,
Atlanta Metropolitan Area, 2000 and 1983

	Location Quotient 2000	Net Export/ Import Role 2000	Location Quotient 1983	Net Export/ Import Role 1983
Agricultural Serv., For., Fish., and oth.	0.63	-0.59	NA	NA
Mining	0.09	-10.43	NA	NA
Construction	1.11	0.10	NA	NA
Manufacturing	0.71	-0.42	0.75	-0.33
Nondurable Goods	0.86	-0.16	0.92	-0.09
Durable Goods	0.62	-0.62	0.64	-0.57
Transportation and Public Utilities	1.57	0.36	1.60	0.37
Wholesale Trade	1.81	0.45	NA	NA
Retail Trade	1.08	0.07	1.04	0.04
Finance, Insurance and Real Estate	1.18	0.15	1.21	0.17
Services	1.01	0.01	0.99	-0.03
Government and Government Enterprises	0.85	-0.17	0.91	-0.10
Federal, Civilian	0.97	-0.04	1.04	0.04
Federal, Military	0.70	-0.43	0.78	-0.28
State and Local	0.86	-0.16	0.90	-0.11

Table 3B. Employment Location Quotient, Export(+) and Import(-) Roles by Sector,
Baltimore Metropolitan Area, 2000 and 1983

	Location Quotient 2000	Net Export/ Import Role 2000	Location Quotient 1983	Net Export/ Import Role 1983
Agricultural Serv., For., Fish., and oth.	0.69	-0.46	NA	NA
Mining	0.01	-114.99	NA	NA
Construction	1.00	0.00	1.08	0.07
Manufacturing	0.71	-0.42	0.71	-0.41
Non-durable Goods	0.75	-0.33	0.74	-0.35
Durable Goods	0.68	-0.48	0.69	-0.45
Transportation and Public Utilities	1.17	0.14	NA	NA
Wholesale Trade	0.90	-0.11	0.98	-0.02
Retail Trade	0.98	-0.02	1.03	0.03
Finance, Insurance and Real Estate	1.05	0.05	1.05	0.04
Services	1.04	0.04	1.07	0.06
Government and Government Enterprises	1.48	0.33	1.34	0.25
Federal, Civilian	2.81	0.64	2.56	0.61
Federal, Military	1.26	0.21	1.15	0.13
State and Local	1.23	0.19	1.10	0.09

Table 3C. Employment Location Quotient, Export(+) and Import(-) Roles by Sector, Boston, Lawrence, Salem, Lowell, Brockton Metropolitan Area, 2000 and 1983

	Location Quotient 2000	Net Export/ Import Role 2000	Location Quotient 1983	Net Export/ Import Role 1983
Agricultural Serv., For., Fish., and oth.	0.63	-0.58	NA	NA
Mining	0.05	-20.15	0.04	-22.64
Construction	0.76	-0.32	0.76	-0.32
Manufacturing	1.23	0.19	1.13	0.11
Nondurable Goods	0.71	-0.41	0.80	-0.25
Durable Goods	1.54	0.35	1.36	0.27
Transportation and Public Utilities	0.88	-0.13	0.90	-0.12
Wholesale Trade	1.01	0.01	1.06	0.06
Retail Trade	0.93	-0.08	0.99	-0.01
Finance, Insurance and Real Estate	1.15	0.13	1.14	0.12
Services	1.22	0.18	1.30	0.23
Government and Government Enterprises	0.73	-0.37	0.77	-0.30
Federal, Civilian	0.75	-0.33	0.79	-0.27
Federal, Military	0.56	-0.78	0.60	-0.68
State and Local	0.76	-0.32	0.80	-0.25

Table 3D. Employment Location Quotient, Export(+) and Import(-) Roles by Sector,
Buffalo Metropolitan Area, 2000 and 1983

	Location Quotient 2000	Net Export/ Import Role 2000	Location Quotient 1983	Net Export/ Import Role 1983
Agricultural Serv., For., Fish., and oth.	0.43	-1.33	0.42	-1.37
Mining	0.26	-2.81	0.18	-4.60
Construction	0.84	-0.19	0.73	-0.36
Manufacturing	0.96	-0.04	1.08	0.08
Nondurable Goods	0.97	-0.03	0.93	-0.07
Durable Goods	0.96	-0.04	1.19	0.16
Transportation and Public Utilities	0.93	-0.07	1.00	0.00
Wholesale Trade	1.13	0.12	1.12	0.11
Retail Trade	1.12	0.11	1.11	0.10
Finance, Insurance and Real Estate Services	0.93	-0.08	0.93	-0.07
Government and Government Enterprises	1.16	0.14	1.11	0.10
Federal, Civilian	0.90	-0.11	0.96	-0.04
Federal, Military	0.76	-0.31	0.71	-0.41
State and Local	0.26	-2.90	0.24	-3.25
	1.06	0.06	1.16	0.14

Table 3E. Employment Location Quotient, Export(+) and Import(-) Roles by Sector,
Chicago Metropolitan Area, 2000 and 1983

	Location Quotient 2000	Net Export/ Import Role 2000	Location Quotient 1983	Net Export/ Import Role 1983
Agricultural Serv., For., Fish., and oth.	0.44	-1.25	NA	NA
Mining	0.06	-16.87	NA	NA
Construction	0.71	-0.40	0.73	-0.37
Manufacturing	1.01	0.01	1.13	0.12
Nondurable Goods	1.02	0.02	1.11	0.10
Durable Goods	1.00	0.00	1.15	0.13
Transportation and Public Utilities	1.10	0.09	1.15	0.13
Wholesale Trade	1.26	0.21	1.48	0.32
Retail Trade	0.95	-0.05	0.97	-0.04
Finance, Insurance and Real Estate	1.40	0.29	1.44	0.31
Services	1.19	0.16	1.14	0.12
Government and Government Enterprises	0.77	-0.29	0.74	-0.35
Federal, Civilian	0.70	-0.44	0.69	-0.45
Federal, Military	0.25	-2.97	0.23	-3.26
State and Local	0.89	-0.12	0.85	-0.17

Table 1F. Employment Location Quotient, Export(+) and Import(-) Roles by Sector,
Cincinnati Metropolitan Area, 2000 and 1983

	Location Quotient 2000	Net Export/ Import Role 2000	Location Quotient 1983	Net Export/ Import Role 1983
Agricultural Serv., For., Fish., and oth.	0.50	-1.02	NA	NA
Mining	0.07	-13.43	NA	NA
Construction	0.96	-0.04	0.92	-0.08
Manufacturing	1.22	0.18	1.25	0.20
Non-durable Goods	1.40	0.29	1.36	0.26
Durable Goods	1.12	0.10	1.17	0.15
Transportation and Public Utilities	0.98	-0.02	NA	NA
Wholesale Trade	1.04	0.04	1.13	0.11
Retail Trade	1.11	0.10	1.11	0.10
Finance, Insurance and Real Estate	0.92	-0.09	0.98	-0.02
Services	1.07	0.06	1.07	0.06
Government and Government Enterprises	0.75	-0.33	0.75	-0.33
Federal, Civilian	0.65	-0.54	0.71	-0.41
Federal, Military	0.30	-2.28	0.29	-2.39
State and Local	0.86	-0.16	0.86	-0.17

Table 3G. Employment Location Quotient, Export(+) and Import(-) Roles by Sector,
Cleveland Metropolitan Area, 2000 and 1983

	Location Quotient 2000	Net Export/ Import Role 2000	Location Quotient 1983	Net Export/ Import Role 1983
Agricultural Serv., For., Fish., and oth.	0.53	-0.88	0.49	-1.05
Mining	0.12	-7.37	0.15	-5.86
Construction	0.82	-0.21	0.78	-0.28
Manufacturing	1.26	0.21	1.32	0.24
Nondurable Goods	1.04	0.04	0.97	-0.03
Durable Goods	1.40	0.28	1.58	0.37
Transportation and Public Utilities	0.92	-0.09	0.96	-0.04
Wholesale Trade	1.15	0.13	1.30	0.23
Retail Trade	0.99	-0.01	1.02	0.02
Finance, Insurance and Real Estate	0.98	-0.02	1.03	0.03
Services	1.11	0.10	1.09	0.08
Government and Government Enterprises	0.81	-0.24	0.77	-0.31
Federal, Civilian	0.85	-0.17	0.79	-0.27
Federal, Military	0.27	-2.64	0.24	-3.13
State and Local	0.90	-0.11	0.87	-0.16

Table 3H. Employment Location Quotient, Export(+) and Import(-) Roles by Sector,
Columbus Metropolitan Area, 2000 and 1983

	Location Quotient 2000	Net Export/ Import Role 2000	Location Quotient 1983	Net Export/ Import Role 1983
Agricultural Serv., For., Fish., and oth.	0.99	-0.01	NA	NA
Mining	0.16	-5.07	NA	-0.22
Construction	0.84	-0.20	0.82	-0.08
Manufacturing	0.86	-0.17	0.92	-0.27
Nondurable Goods	0.87	-0.15	0.79	0.02
Durable Goods	0.85	-0.18	1.02	-0.15
Transportation and Public Utilities	0.87	-0.15	0.87	-0.07
Wholesale Trade	0.97	-0.03	0.93	0.11
Retail Trade	1.06	0.06	1.12	0.28
Finance, Insurance and Real Estate	1.45	0.31	1.40	0.01
Services	1.06	0.05	1.01	0.07
Government and Government Enterprises	1.04	0.04	1.07	-0.17
Federal, Civilian	0.76	-0.31	0.86	-2.81
Federal, Military	0.26	-2.89	0.26	0.22
State and Local	1.26	0.20	1.28	

Table 31. Employment Location Quotient, Export(+) and Import(-) Roles by Sector,
Dallas Metropolitan Area, 2000 and 1983

	Location Quotient 2000	Net Export/ Import Role 2000	Location Quotient 1983	Net Export/ Import Role 1983
Agricultural Serv., For., Fish., and oth.	0.50	-1.02	NA	NA
Mining	2.54	0.61	NA	NA
Construction	1.14	0.12	1.38	0.27
Manufacturing	0.96	-0.04	0.95	-0.05
Nondurable Goods	0.77	-0.29	0.74	-0.35
Durable Goods	1.07	0.07	1.10	0.09
Transportation and Public Utilities	1.15	0.13	1.21	0.17
Wholesale Trade	1.60	0.38	1.72	0.42
Retail Trade	1.00	0.00	1.02	0.02
Finance, Insurance and Real Estate	1.45	0.31	1.55	0.35
Services	1.00	0.00	0.98	-0.02
Government and Government Enterprises	0.62	-0.62	0.62	-0.61
Federal, Civilian	0.68	-0.47	0.65	-0.54
Federal, Military	0.28	-2.56	0.30	-2.28
State and Local	0.67	-0.50	0.68	-0.47

Table 3J. Employment Location Quotient, Export(+) and Import(-) Roles by Sector,
Denver Metropolitan Area, 2000 and 1983

	Location Quotient 2000	Net Export/ Import Role 2000	Location Quotient 1983	Net Export/ Import Role 1983
Agricultural Serv., For., Fish., and oth.	0.84	-0.19	0.77	-0.30
Mining	3.46	0.71	3.28	0.69
Construction	1.17	0.15	1.35	0.26
Manufacturing	0.55	-0.82	0.62	-0.62
Nondurable Goods	0.66	-0.52	0.68	-0.47
Durable Goods	0.49	-1.06	0.57	-0.75
Transportation and Public Utilities	1.44	0.30	1.39	0.28
Wholesale Trade	1.34	0.25	1.32	0.24
Retail Trade	0.99	-0.01	1.04	0.04
Finance, Insurance and Real Estate	1.37	0.27	1.39	0.28
Services	1.10	0.09	1.07	0.06
Government and Government Enterprises	0.88	-0.14	0.90	-0.11
Federal, Civilian	1.15	0.13	1.26	0.21
Federal, Military	0.73	-0.37	0.85	-0.17
State and Local	0.84	-0.19	0.83	-0.21

Table 3K. Employment Location Quotient, Export(+) and Import(-) Roles by Sector,
Detroit Metropolitan Area, 2000 and 1983

	Location Quotient 2000	Net Export/ Import Role 2000	Location Quotient 1983	Net Export/ Import Role 1983
Agricultural Serv., For., Fish., and oth.	0.47	-1.11	NA	NA
Mining	0.08	-11.07	NA	NA
Construction	0.68	-0.47	NA	NA
Manufacturing	1.40	0.28	1.39	0.28
Nondurable Goods	0.55	-0.82	0.58	-0.72
Durable Goods	1.89	0.47	1.97	0.49
Transportation and Public Utilities	0.86	-0.16	NA	NA
Wholesale Trade	0.82	-0.22	0.94	-0.06
Retail Trade	1.08	0.07	1.09	0.08
Finance, Insurance and Real Estate	0.90	-0.11	0.98	-0.02
Services	1.10	0.09	1.10	0.09
Government and Government Enterprises	0.77	-0.29	0.77	-0.29
Federal, Civilian	0.70	-0.43	0.66	-0.51
Federal, Military	0.29	-2.45	0.26	-2.82
State and Local	0.88	-0.13	0.90	-0.11

Table 3L. Employment Location Quotient, Export(+) and Import(-) Roles by Sector,
El Paso Metropolitan Area, 2000 and 1983

	Location Quotient 2000	Net Export/ Import Role 2000	Location Quotient 1983	Net Export/ Import Role 1983
Agricultural Serv., For., Fish., and oth.	0.45	-1.20	0.38	-1.61
Mining	0.25	-2.93	0.22	-3.62
Construction	0.95	-0.05	1.06	0.06
Manufacturing	1.30	0.23	1.02	0.02
Nondurable Goods	1.95	0.49	1.63	0.39
Durable Goods	0.92	-0.09	0.58	-0.71
Transportation and Public Utilities	0.95	-0.05	1.04	0.04
Wholesale Trade	0.92	-0.08	0.96	-0.04
Retail Trade	0.91	-0.09	1.01	0.01
Finance, Insurance and Real Estate	0.72	-0.39	0.77	-0.29
Services	0.76	-0.32	0.77	-0.29
Government and Government Enterprises	1.63	0.39	1.56	0.36
Federal, Civilian	1.60	0.38	1.56	0.36
Federal, Military	3.97	0.75	3.99	0.75
State and Local	1.18	0.15	1.07	0.07

Table 3M. Employment Location Quotient, Export(+) and Import(-) Roles by Sector,
Fort-Worth Metropolitan Area, 2000 and 1983

	Location Quotient 2000	Net Export/ Import Role 2000	Location Quotient 1983	Net Export/ Import Role 1983
Agricultural Serv., For., Fish., and oth.	0.64	-0.57	NA	NA
Mining	1.04	0.04	NA	NA
Construction	1.17	0.15	1.39	0.28
Manufacturing	1.15	0.13	1.15	0.13
Nondurable Goods	0.85	-0.18	0.77	-0.31
Durable Goods	1.32	0.24	1.42	0.30
Transportation and Public Utilities	1.05	0.05	1.00	0.00
Wholesale Trade	1.06	0.06	1.10	0.09
Retail Trade	1.28	0.22	1.24	0.19
Finance, Insurance and Real Estate	0.82	-0.21	0.91	-0.09
Services	0.95	-0.05	0.94	-0.07
Government and Government Enterprises	0.73	-0.37	0.76	-0.32
Federal, Civilian	0.80	-0.26	0.84	-0.19
Federal, Military	0.65	-0.53	0.72	-0.38
State and Local	0.73	-0.37	0.74	-0.37

Table UN. Employment Location Quotient, Export(+) and Import(-) Roles by Sector,
Houston Metropolitan Area, 2000 and 1983

	Location Quotient 2000	Net Export/ Import Role 2000	Location Quotient 1983	Net Export/ Import Role 1983
Agricultural Serv., For., Fish., and oth.	0.51	-0.96	0.59	-0.69
Mining	6.57	0.85	6.61	0.85
Construction	1.68	0.40	1.90	0.47
Manufacturing	0.72	-0.39	0.66	-0.53
Nondurable Goods	0.74	-0.35	0.70	-0.43
Durable Goods	0.71	-0.41	0.62	-0.60
Transportation and Public Utilities	1.26	0.21	1.32	0.24
Wholesale Trade	1.35	0.26	1.44	0.31
Retail Trade	0.95	-0.05	1.00	0.00
Finance, Insurance and Real Estate	1.18	0.15	1.24	0.19
Services	1.02	0.02	1.03	0.03
Government and Government Enterprises	0.65	-0.53	0.67	-0.50
Federal, Civilian	0.48	-1.08	0.50	-0.98
Federal, Military	0.26	-2.79	0.31	-2.24
State and Local	0.76	-0.31	0.78	-0.29

Table 30. Employment Location Quotient, Export(+) and Import(-) Roles by Sector,
Indianapolis Metropolitan Area, 2000 and 1983

	Location Quotient 2000	Net Export/ Import Role 2000	Location Quotient 1983	Net Export/ Import Role 1983
Agricultural Serv., For., Fish., and oth.	0.63	-0.59	NA	NA
Mining	0.18	-4.46	NA	NA
Construction	0.94	-0.07	0.92	-0.08
Manufacturing	1.08	0.07	1.05	0.05
Nondurable Goods	0.88	-0.14	0.84	-0.15
Durable Goods	1.20	0.17	1.20	0.17
Transportation and Public Utilities	1.14	0.12	NA	NA
Wholesale Trade	1.03	0.03	1.16	0.14
Retail Trade	1.10	0.09	1.09	0.05
Finance, Insurance and Real Estate	1.17	0.14	1.31	0.24
Services	0.93	-0.07	0.95	-0.06
Government and Government Enterprises	0.96	-0.04	0.93	-0.07
Federal, Civilian	1.05	0.05	1.08	0.07
Federal, Military	0.67	-0.49	0.65	-0.54
State and Local	1.00	0.00	0.96	-0.05

Table 1P. Employment Location Quotient, Export(+) and Import(-) Roles by Sector,
Jacksonville Metropolitan Area, 2000 and 1983

	Location Quotient 2000	Net Export/ Import Role 2000	Location Quotient 1983	Net Export/ Import Role 1983
Agricultural Serv., For., Fish., and oth.	0.59	-0.69	NA	NA
Mining	0.13	-6.57	NA	NA
Construction	1.19	0.16	1.32	0.24
Manufacturing	0.49	-1.02	0.50	-1.00
Non-durable Goods	0.66	-0.51	0.64	-0.56
Durable Goods	0.40	-1.53	0.40	-1.51
Transportation and Public Utilities	1.40	0.28	1.42	0.30
Wholesale Trade	1.14	0.13	NA	NA
Retail Trade	1.06	0.06	1.05	0.05
Finance, Insurance and Real Estate	1.36	0.26	1.48	0.32
Services	1.03	0.03	1.01	0.01
Government and Government Enterprises	1.29	0.22	1.24	0.19
Federal, Civilian	1.60	0.38	1.42	0.30
Federal, Military	3.29	0.70	3.38	0.70
State and Local	0.83	-0.21	0.77	-0.30

Table 3Q. Employment Location Quotient, Export(+) and Import(-) Roles by Sector,
Kansas City Metropolitan Area, 2000 and 1983

	Location Quotient 2000	Net Export/ Import Role 2000	Location Quotient 1983	Net Export/ Import Role 1983
Agricultural Serv., For., Fish., and oth.	0.61	-0.63	NA	NA
Mining	0.12	-7.16	NA	NA
Construction	0.81	-0.23	0.87	-0.15
Manufacturing	0.85	-0.17	0.88	-0.14
Nondurable Goods	0.93	-0.08	0.93	-0.08
Durable Goods	0.81	-0.24	0.84	-0.18
Transportation and Public Utilities	1.28	0.22	1.49	0.33
Wholesale Trade	1.23	0.19	1.36	0.26
Retail Trade	1.04	0.04	1.04	0.04
Finance, Insurance and Real Estate	1.29	0.23	1.27	0.21
Services	1.05	0.05	1.02	0.02
Government and Government Enterprises	0.96	-0.04	0.92	-0.08
Federal, Civilian	1.38	0.28	1.41	0.29
Federal, Military	0.83	-0.21	0.79	-0.26
State and Local	0.89	-0.12	0.84	-0.19

Table 18. Employment Location Quotient, Export(+) and Import(-) Roles by Sector,
Los Angeles Metropolitan Area, 2000 and 1983

	Location Quotient 2000	Net Export/ Import Role 2000	Location Quotient 1983	Net Export/ Import Role 1983
Agricultural Serv., For., Fish., and oth.	0.72	-0.40	0.85	-0.18
Mining	0.28	-2.54	0.36	-1.75
Construction	0.57	-0.76	0.65	-0.55
Manufacturing	1.23	0.19	1.24	0.20
Nondurable Goods	1.06	0.06	1.00	0.00
Durable Goods	1.32	0.24	1.42	0.30
Transportation and Public Utilities	1.01	0.01	1.02	0.02
Wholesale Trade	1.29	0.22	1.33	0.25
Retail Trade	0.87	-0.15	0.93	-0.07
Finance, Insurance and Real Estate	1.08	0.07	1.18	0.15
Services	1.22	0.18	1.21	0.17
Government and Government Enterprises	0.74	-0.35	0.72	-0.39
Federal, Civilian	0.70	-0.43	0.64	-0.55
Federal, Military	0.38	-1.60	0.38	-1.65
State and Local	0.82	-0.22	0.80	-0.24

Table 35. Employment Location Quotient, Export(+) and Import(-) Roles by Sector,
Memphis Metropolitan Area, 2000 and 1983

	Location Quotient 2000	Net Export/ Import Role 2000	Location Quotient 1983	Net Export/ Import Role 1983
Agricultural Serv., For., Fish., and oth.	0.58	-0.71	0.53	-0.85
Mining	0.04	-23.48	NA	NA
Construction	0.92	-0.09	0.93	-0.08
Manufacturing	0.74	-0.36	0.78	-0.29
Nondurable Goods	1.07	0.06	1.03	0.03
Durable Goods	0.55	-0.83	0.59	-0.68
Transportation and Public Utilities	1.37	0.27	1.32	0.24
Wholesale Trade	1.53	0.35	NA	NA
Retail Trade	1.06	0.06	1.05	0.05
Finance, Insurance and Real Estate	0.92	-0.09	NA	NA
Services	1.09	0.08	1.08	0.07
Government and Government Enterprises	1.03	0.02	1.05	0.05
Federal, Civilian	1.44	0.31	1.44	0.31
Federal, Military	1.44	0.31	1.39	0.28
State and Local	0.85	-0.18	0.89	-0.12

Table 3T. Employment Location Quotient, Export(+) and Import(-) Roles by Sector,
Milwaukee Metropolitan Area, 2000 and 1983

	Location Quotient 2000	Net Export/ Import Role 2000	Location Quotient 1983	Net Export/ Import Role 1983
Agricultural Serv., For., Fish., and oth.	0.42	-1.38	0.39	-1.55
Mining	0.07	-13.86	NA	NA
Construction	0.60	-0.67	NA	NA
Manufacturing	1.32	0.24	1.36	0.26
Non-durable Goods	0.96	-0.04	0.93	-0.08
Durable Goods	1.53	0.35	1.67	0.40
Transportation and Public Utilities	0.94	-0.07	0.99	-0.01
Wholesale Trade	0.97	-0.03	1.10	0.09
Retail Trade	0.95	-0.05	1.01	0.01
Finance, Insurance and Real Estate	1.20	0.17	1.22	0.18
Services	1.20	0.17	1.15	0.13
Government and Government Enterprises	0.65	-0.53	0.66	-0.50
Federal, Civilian	0.55	-0.83	0.54	-0.87
Federal, Military	0.50	-1.01	0.46	-1.17
State and Local	0.71	-0.41	0.73	-0.36

Table 3U. Employment Location Quotient, Export(+) and Import(-) Roles by Sector,
Minneapolis Metropolitan Area, 2000 and 1983

	Location Quotient 2000	Net Export/ Import Role 2000	Location Quotient 1983	Net Export/ Import Role 1983
Agricultural Serv., For., Fish., and oth.	0.53	-0.87	NA	NA
Mining	0.10	-9.14	NA	NA
Construction	0.85	-0.18	0.84	-0.20
Manufacturing	1.22	0.18	1.14	0.12
Nondurable Goods	1.07	0.07	NA	NA
Durable Goods	1.31	0.23	NA	0.08
Transportation and Public Utilities	0.96	-0.04	1.09	NA
Wholesale Trade	1.07	0.07	NA	0.07
Retail Trade	1.03	0.03	1.08	0.19
Finance, Insurance and Real Estate	1.16	0.14	1.23	0.08
Services	1.08	0.07	1.09	0.08
Government and Government Enterprises	0.73	-0.37	0.73	-0.36
Federal, Civilian	0.56	-0.79	0.59	-0.71
Federal, Military	0.28	-2.57	0.30	-2.30
State and Local	0.86	-0.17	0.85	-0.17

Table IV. Employment Location Quotient, Export(+) and Import(-) Roles by Sector,
Nashville Metropolitan Area, 2000 and 1983

	Location Quotient 2000	Net Export/ Import Role 2000	Location Quotient 1983	Net Export/ Import Role 1983
Agricultural Serv., For., Fish., and oth.	0.66	-0.52	NA	NA
Mining	0.23	-3.28	NA	NA
Construction	1.15	0.13	1.16	0.14
Manufacturing	1.04	0.04	1.03	0.03
Nondurable Goods	1.09	0.08	NA	NA
Durable Goods	1.02	0.02	NA	NA
Transportation and Public Utilities	1.12	0.11	1.09	0.08
Wholesale Trade	1.11	0.10	NA	NA
Retail Trade	1.09	0.08	1.02	0.02
Finance, Insurance and Real Estate	0.92	-0.09	1.06	0.05
Services	1.04	0.04	NA	NA
Government and Government Enterprises	0.76	-0.31	0.80	-0.24
Federal, Civilian	0.72	-0.40	0.78	-0.29
Federal, Military	0.33	-2.05	0.35	-1.85
State and Local	0.86	-0.16	0.90	-0.11

Table 3W. Employment Location Quotient, Export(+) and Import(-) Roles by Sector,
New Orleans Metropolitan Area, 2000 and 1983

	Location Quotient 2000	Net Export/ Import Role 2000	Location Quotient 1983	Net Export/ Import Role 1983
Agricultural Serv., For., Fish., and oth.	0.46	-1.16	0.49	-1.03
Mining	2.44	0.59	3.67	0.73
Construction	1.20	0.16	1.43	0.30
Manufacturing	0.51	-0.96	0.48	-1.08
Nondurable Goods	0.58	-0.72	0.57	-0.77
Durable Goods	0.47	-1.13	0.42	-1.38
Transportation and Public Utilities	1.63	0.39	1.73	0.42
Wholesale Trade	1.04	0.03	1.20	0.17
Retail Trade	1.05	0.05	1.07	0.06
Finance, Insurance and Real Estate	0.97	-0.03	1.06	0.06
Services	1.18	0.15	1.14	0.13
Government and Government Enterprises	1.02	0.02	0.95	-0.05
Federal, Civilian	0.98	-0.02	0.90	-0.11
Federal, Military	0.66	-0.52	0.62	-0.62
State and Local	1.10	0.09	1.03	0.03

Table IX. Employment Location Quotient, Export(+) and Import(-) Roles by Sector,
New York Metropolitan Area, 2000 and 1983

	Location Quotient 2000	Net Export/ Import Role 2000	Location Quotient 1983	Net Export/ Import Role 1983
Agricultural Serv., For., Fish., and oth.	0.33	-2.07	NA	NA
Mining	0.08	-10.86	NA	NA
Construction	0.66	-0.52	0.63	-0.60
Manufacturing	0.59	-0.69	0.73	-0.37
Nondurable Goods	1.08	0.07	1.20	0.17
Durable Goods	0.31	-2.24	0.39	-1.59
Transportation and Public Utilities	1.29	0.22	1.32	0.24
Wholesale Trade	1.34	0.25	1.35	0.26
Retail Trade	0.65	-0.53	0.72	-0.39
Finance, Insurance and Real Estate Services	2.27	0.56	2.25	0.56
Government and Government Enterprises	1.36	0.27	1.37	0.27
Federal, Civilian	0.86	-0.16	0.84	-0.19
Federal, Military	0.70	-0.42	0.73	-0.37
State and Local	0.28	-2.51	0.22	-3.60
	1.01	0.01	0.99	-0.01

Table 3Y. Employment Location Quotient, Export(+) and Import(-) Roles by Sector,
Oklahoma City Metropolitan Area, 2000 and 1983

	Location Quotient 2000	Net Export/ Import Role 2000	Location Quotient 1983	Net Export/ Import Role 1983
Agricultural Serv., For., Fish., and oth.	0.59	-0.71	0.47	-1.13
Mining	5.68	0.82	5.11	0.80
Construction	1.13	0.11	1.17	0.15
Manufacturing	0.71	-0.42	0.58	-0.72
Nondurable Goods	0.47	-1.14	0.45	-1.21
Durable Goods	0.84	-0.18	0.67	-0.49
Transportation and Public Utilities	0.95	-0.05	1.01	0.02
Wholesale Trade	1.08	0.07	1.07	0.06
Retail Trade	1.13	0.12	1.12	0.11
Finance, Insurance and Real Estate	1.05	0.05	1.14	0.12
Services	0.85	-0.18	0.86	-0.16
Government and Government Enterprises	1.22	0.18	1.30	0.23
Federal, Civilian	1.91	0.48	2.11	0.53
Federal, Military	1.05	0.05	1.12	0.13
State and Local	1.10	0.09	1.15	0.13

Table 12. Employment Location Quotient, Export(+) and Import(-) Roles by Sector, Philadelphia Metropolitan Area, 2000 and 1983

	Location Quotient 2000	Net Export/ Import Role 2000	Location Quotient 1983	Net Export/ Import Role 1983
Agricultural Serv., For., Fish., and oth.	0.74	-0.35	NA	NA
Mining	0.05	-20.06	NA	NA
Construction	0.85	-0.18	0.87	-0.14
Manufacturing	0.95	-0.06	1.05	0.04
Nondurable Goods	1.11	0.10	1.19	0.16
Durable Goods	0.85	-0.17	0.94	-0.06
Transportation and Public Utilities	0.87	-0.15	0.91	-0.10
Wholesale Trade	1.18	0.15	1.15	0.13
Retail Trade	0.98	-0.02	1.00	0.00
Finance, Insurance and Real Estate	1.10	0.09	1.15	0.13
Services	1.23	0.18	1.20	0.16
Government and Government Enterprises	0.90	-0.11	0.89	-0.12
Federal, Civilian	1.24	0.19	1.26	0.21
Federal, Military	1.03	0.03	0.96	-0.05
State and Local	0.80	-0.25	0.80	-0.26

Table 3AA. Employment Location Quotient, Export(+) and Import(-) Roles by Sector,
Phoenix Metropolitan Area, 2000 and 1983

	Location Quotient 2000	Net Export/ Import Role 2000	Location Quotient 1983	Net Export/ Import Role 1983
Agricultural Serv., For., Fish., and oth.	1.44	0.31	1.53	0.35
Mining	0.12	-7.39	0.11	-7.95
Construction	1.56	0.36	1.63	0.35
Manufacturing	0.86	-0.17	0.83	-0.20
Nondurable Goods	0.44	-1.27	0.43	-1.32
Durable Goods	1.10	0.09	1.12	0.11
Transportation and Public Utilities	0.89	-0.13	0.88	-0.14
Wholesale Trade	1.02	0.02	1.04	0.04
Retail Trade	1.15	0.13	1.15	0.13
Finance, Insurance and Real Estate	1.29	0.22	1.32	0.24
Services	1.03	0.03	1.05	0.05
Government and Government Enterprises	0.80	-0.25	0.88	-0.14
Federal, Civilian	0.64	-0.57	0.69	-0.46
Federal, Military	0.61	-0.65	0.84	-0.15
State and Local	0.87	-0.14	0.93	-0.08

Table 3AB. Employment Location Quotient, Export(+) and Import(-) Roles by Sector,
Pittsburgh Metropolitan Area, 2000 and 1983

	Location Quotient 2000	Net Export/ Import Role 2000	Location Quotient 1983	Net Export/ Import Role 1983
Agricultural Serv., For., Fish., and oth.	0.54	-0.85	0.45	-1.23
Mining	0.73	-0.37	0.91	-0.09
Construction	1.07	0.07	1.06	0.06
Manufacturing	0.94	-0.07	0.98	-0.02
Nondurable Goods	0.61	-0.63	0.58	-0.74
Durable Goods	1.13	0.11	1.28	0.22
Transportation and Public Utilities	1.04	0.04	1.08	0.07
Wholesale Trade	1.01	0.01	1.06	0.06
Retail Trade	1.13	0.12	1.13	0.12
Finance, Insurance and Real Estate Services	0.98	-0.02	0.99	-0.01
Government and Government Enterprises	1.20	0.17	1.22	0.18
Federal, Civilian	0.73	-0.37	0.75	-0.33
Federal, Military	0.71	-0.41	0.69	-0.44
State and Local	0.68	-0.47	0.61	-0.64
	0.74	-0.35	0.80	-0.26

Table 3AC. Employment Location Quotient, Export(+) and Import(-) Roles by Sector,
St. Louis Metropolitan Area, 2000 and 1983

	Location Quotient 2000	Net Export/ Import Role 2000	Location Quotient 1983	Net Export/ Import Role 1983
Agricultural Serv., For., Fish., and oth.	0.53	-0.90	NA	NA
Mining	0.42	-1.40	NA	NA
Construction	1.03	0.02	0.98	-0.02
Manufacturing	1.00	0.00	1.07	0.06
Nondurable Goods	0.95	-0.06	1.00	0.00
Durable Goods	1.03	0.03	1.11	0.10
Transportation and Public Utilities	1.21	0.17	1.28	0.22
Wholesale Trade	0.97	-0.03	1.07	0.07
Retail Trade	1.04	0.04	1.02	0.02
Finance, Insurance and Real Estate	0.98	-0.02	1.01	0.01
Services	1.17	0.14	1.16	0.14
Government and Government Enterprises	0.78	-0.28	0.81	-0.24
Federal, Civilian	1.14	0.12	1.19	0.16
Federal, Military	0.79	-0.27	0.75	-0.33
State and Local	0.70	-0.42	0.73	-0.36

Table 11AD. Employment Location Quotient, Export(+) and Import(-) Roles by Sector,
San Antonio Metropolitan Area, 2000 and 1983

	Location Quotient 2000	Net Export/ Import Role 2000	Location Quotient 1983	Net Export/ Import Role 1983
Agricultural Serv., For., Fish., and oth.	0.40	-1.53	0.41	-1.42
Mining	0.70	-0.44	0.74	-0.35
Construction	1.37	0.27	1.45	0.31
Manufacturing	0.66	-0.51	0.56	-0.80
Nondurable Goods	0.74	-0.35	0.65	-0.54
Durable Goods	0.62	-0.62	0.49	-1.05
Transportation and Public Utilities	0.78	-0.28	0.70	-0.42
Wholesale Trade	0.88	-0.14	0.94	-0.07
Retail Trade	1.11	0.10	1.11	0.10
Finance, Insurance and Real Estate	1.14	0.12	1.14	0.12
Services	0.94	-0.06	0.94	-0.06
Government and Government Enterprises	1.50	0.34	1.54	0.35
Federal, Civilian	2.51	0.60	2.66	0.62
Federal, Military	3.22	0.69	3.30	0.70
State and Local	0.95	-0.05	0.94	-0.07

Table 3A.E. Employment Location Quotient, Export(+) and Import(-) Roles by Sector,
San Diego Metropolitan Area, 2000 and 1983

	Location Quotient 2000	Net Export/ Import Role 2000	Location Quotient 1983	Net Export/ Import Role 1983
Agricultural Serv., For., Fish., and oth.	1.37	0.27	1.56	0.36
Mining	0.05	-17.21	0.07	-13.24
Construction	1.03	0.03	0.92	-0.09
Manufacturing	0.75	-0.33	0.67	-0.48
Nondurable Goods	0.35	-1.85	0.30	-2.29
Durable Goods	0.99	-0.01	0.94	-0.06
Transportation and Public Utilities	0.73	-0.36	0.69	-0.44
Wholesale Trade	0.80	-0.24	0.67	-0.50
Retail Trade	1.03	0.03	0.98	-0.02
Finance, Insurance and Real Estate	1.16	0.14	1.01	0.01
Services	1.00	0.00	1.00	0.00
Government and Government Enterprises	1.51	0.34	1.71	0.41
Federal, Civilian	1.49	0.33	1.64	0.39
Federal, Military	5.06	0.80	5.95	0.83
State and Local	0.83	-0.21	0.86	-0.16

Table 3AF. Employment Location Quotient, Export(+) and Import(-) Roles by Sector,
San Francisco Metropolitan Area, 2000 and 1983

	Location Quotient 2000	Net Export/ Import Role 2000	Location Quotient 1983	Net Export/ Import Role 1983
Agricultural Serv., For., Fish., and oth.	0.91	-0.09	NA	NA
Mining	0.37	-1.69	NA	NA
Construction	0.82	-0.23	0.73	-0.37
Manufacturing	0.47	-1.11	0.52	-0.94
Nondurable Goods	0.77	-0.30	0.75	-0.33
Durable Goods	0.30	-2.31	0.35	-1.89
Transportation and Public Utilities	1.38	0.28	1.67	0.40
Wholesale Trade	1.05	0.05	1.20	0.16
Retail Trade	0.94	-0.06	0.91	-0.09
Finance, Insurance and Real Estate	1.95	0.49	2.13	0.53
Services	1.33	0.25	1.34	0.25
Government and Government Enterprises	0.80	-0.25	0.81	-0.23
Federal, Civilian	1.16	0.14	1.27	0.21
Federal, Military	0.48	-1.07	0.49	-1.05
State and Local	0.78	-0.28	0.78	-0.29

Table 3AG. Employment Location Quotient, Export(+) and Import(-) Location Quotient, San Jose Metropolitan Area, 2000 and 1983

	Location Quotient 2000	Net Export/ Import Role 2000	Location Quotient 1983	Net Export/ Import Role 1983
Agricultural Serv., For., Fish., and oth.	0.72	-0.39	0.89	-0.12
Mining	0.03	-37.48	0.03	-35.95
Construction	0.62	-0.61	0.73	-0.36
Manufacturing	1.99	0.50	1.90	0.47
Nondurable Goods	0.37	-1.74	0.46	-1.18
Durable Goods	2.93	0.66	2.93	0.66
Transportation and Public Utilities	0.47	-1.11	0.58	-0.73
Wholesale Trade	0.87	-0.16	0.82	-0.22
Retail Trade	0.77	-0.29	0.83	-0.20
Finance, Insurance and Real Estate	0.69	-0.44	0.73	-0.37
Services	1.15	0.13	1.15	0.13
Government and Government Enterprises	0.57	-0.74	0.63	-0.60
Federal, Civilian	0.49	-1.02	0.52	-0.94
Federal, Military	0.42	-1.37	0.52	-0.92
State and Local	0.62	-0.61	0.67	-0.49

Table 3AH. Employment Location Quotient, Export(+) and Import(-) Roles by Sector,
Seattle Metropolitan Area, 2000 and 1983

	Location Quotient 2000	Net Export/ Import Role 2000	Location Quotient 1983	Net Export/ Import Role 1983
Agricultural Serv., For., Fish., and oth.	1.16	0.14	1.27	0.21
Mining	0.06	-15.43	0.07	-12.36
Construction	0.98	-0.02	1.02	0.02
Manufacturing	1.03	0.03	1.00	0.00
Nondurable Goods	0.49	-1.04	0.48	-1.10
Durable Goods	1.35	0.26	1.38	0.28
Transportation and Public Utilities	1.28	0.22	1.25	0.20
Wholesale Trade	1.16	0.14	1.25	0.20
Retail Trade	1.04	0.04	1.09	0.08
Finance, Insurance and Real Estate	1.28	0.22	1.30	0.23
Services	1.00	0.00	1.01	0.01
Government and Government Enterprises	0.84	-0.19	0.87	-0.15
Federal, Civilian	0.72	-0.39	0.78	-0.28
Federal, Military	0.92	-0.08	0.59	-0.71
State and Local	0.85	-0.17	0.95	-0.06

Table 3A1. Employment Location quotient, Export(+) and Import(-) roles by sector,
Washington, DC Metropolitan Area, 2000 and 1983

	Location Quotient 2000	Net Export/ Import Role 2000	Location Quotient 1983	Net Export/ Import Role 1983
Agricultural Serv., For., Fish., and oth.	0.79	-0.27	NA	NA
Mining	0.09	-9.62	NA	NA
Construction	0.98	-0.02	NA	NA
Manufacturing	0.26	-2.90	0.21	-3.77
Nondurable Goods	0.33	-2.07	0.27	-2.75
Durable Goods	0.22	-3.61	0.17	-4.91
Transportation and Public Utilities	0.87	-0.15	NA	NA
Wholesale Trade	0.72	-0.39	NA	NA
Retail Trade	0.88	-0.14	0.89	-0.12
Finance, Insurance and Real Estate Services	0.91	-0.10	NA	ERR
Government and Government Enterprises	1.36	0.27	1.33	0.25
Federal, Civilian	1.80	0.44	1.86	0.45
Federal, Military	6.41	0.84	6.74	0.85
State and Local	1.81	0.45	1.86	0.45
	0.78	-0.28	0.77	-0.33

Source: US Department of Commerce, Bureau of Economic Analysis, 1985 OBERS Projections

Notes: "NA" indicates that data are undisclosed.
 Year 2000 projections are based on 1983 data.
 The location quotient is $= (E_{ij}/E_j)/(E_i/E)$ where
 E_{ij} =employment in industry i in metro area j
 E_j = total employment in metro area j
 E_i = employment in industry i in the nation
 E = total employment in the nation
 The net export/import role is based on the location quotient (LQ)
 and equal to $(1-(1/LQ))$

Table 4A. Ranking of Metropolitan Areas on 2000 Projected Location Quotient for Finance

	Location Net Export/ Quotient Import Role Rank			Location Net Export/ Quotient Import Role Rank		
	2000	2000	2000	1983	1983	1983
New York	2.27	0.56	1	2.25	0.56	1
San Francisco	1.95	0.49	2	2.13	0.53	2
Columbus	1.45	0.31	3	1.40	0.28	6
Dallas	1.45	0.31	3	1.55	0.35	3
Chicago	1.40	0.29	5	1.44	0.31	5
Denver	1.37	0.27	6	1.39	0.28	6
Jacksonville	1.36	0.26	7	1.48	0.32	4
Kansas City	1.29	0.23	8	1.27	0.21	11
Phoenix	1.29	0.22	9	1.32	0.24	8
Seattle	1.28	0.22	9	1.30	0.23	10
Milwaukee	1.20	0.17	11	1.22	0.18	14
Atlanta	1.18	0.15	12	1.21	0.17	15
Houston	1.18	0.15	12	1.24	0.19	12
Indianapolis	1.17	0.14	14	1.31	0.24	8
San Diego	1.16	0.14	14	1.01	0.01	25
Minneapolis	1.16	0.14	14	1.23	0.19	12
BOSTON	1.15	0.13	17	1.14	0.12	18
San Antonio	1.14	0.12	18	1.14	0.12	18
Philadelphia	1.10	0.09	19	1.15	0.13	17
Los Angeles	1.08	0.07	20	1.18	0.15	16
Oklahoma City	1.05	0.05	21	1.14	0.12	18
Baltimore	1.05	0.05	21	1.05	0.04	23
Pittsburgh	0.98	-0.02	23	0.99	-0.01	27
Cleveland	0.98	-0.02	23	1.03	0.03	24
St. Louis	0.98	-0.02	23	1.01	0.01	25
New Orleans	0.97	-0.03	26	1.06	0.06	21
Buffalo	0.93	-0.08	27	0.93	-0.07	30
Nashville	0.92	-0.09	28	1.06	0.05	22
Cincinnati	0.92	-0.09	28	0.98	-0.02	28
Memphis	0.92	-0.09	28	NA	NA	NA
Washington, DC	0.91	-0.10	31	NA	NA	NA
Detroit	0.90	-0.11	32	0.98	-0.02	28
Fort-Worth	0.82	-0.21	33	0.91	-0.09	31
El Paso	0.72	-0.39	34	0.77	-0.29	32
San Jose	0.69	-0.44	35	0.73	-0.37	33

Table 4B. Ranking of Metropolitan Areas on 2000 Projected Location Quotient for Manufacturing

	Location Net Export/ Quotient Import Role Rank			Location Net Export/ Quotient Import Role Rank		
	2000	2000	2000	1983	1983	1983
San Jose	1.99	0.50	1	1.90	0.47	1
Detroit	1.40	0.28	2	1.39	0.28	2
Milwaukee	1.32	0.24	3	1.36	0.26	3
El Paso	1.30	0.23	4	1.02	0.02	16
Cleveland	1.26	0.21	5	1.32	0.24	4
BOSTON	1.23	0.19	6	1.13	0.11	10
Los Angeles	1.23	0.19	7	1.24	0.20	6
Cincinnati	1.22	0.18	8	1.25	0.20	5
Minneapolis	1.22	0.18	9	1.14	0.12	8
Fort-Worth	1.15	0.13	10	1.15	0.13	7
Indianapolis	1.08	0.07	11	1.05	0.05	13
Nashville	1.04	0.04	12	1.03	0.03	15
Seattle	1.03	0.03	13	1.00	0.00	17
Chicago	1.01	0.01	14	1.13	0.12	9
St. Louis	1.00	0.00	15	1.07	0.06	12
Dallas	0.96	-0.04	16	0.95	-0.05	19
Buffalo	0.96	-0.04	17	1.08	0.08	11
Philadelphia	0.95	-0.06	18	1.05	0.04	14
Pittsburgh	0.94	-0.07	19	0.98	-0.02	18
Columbus	0.86	-0.17	20	0.92	-0.08	20
Phoenix	0.86	-0.17	21	0.83	-0.20	22
Kansas City	0.85	-0.17	22	0.88	-0.14	21
San Diego	0.75	-0.33	23	0.67	-0.48	27
Memphis	0.74	-0.36	24	0.78	-0.29	23
Houston	0.72	-0.39	25	0.66	-0.53	28
Oklahoma City	0.71	-0.42	26	0.58	-0.73	30
Baltimore	0.71	-0.42	26	0.71	-0.41	26
Atlanta	0.71	-0.42	26	0.75	-0.33	24
San Antonio	0.66	-0.51	29	0.56	-0.80	31
New York	0.59	-0.69	30	0.73	-0.37	25
Denver	0.55	-0.82	31	0.62	-0.62	29
New Orleans	0.51	-0.96	32	0.48	-1.08	34
Jacksonville	0.49	-1.02	33	0.50	-1.00	33
San Francisco	0.47	-1.11	34	0.52	-0.94	32
Washington, DC	0.26	-2.90	35	0.21	-3.77	35

Table 4C. Ranking of Metropolitan Areas on 2000 Projected Location Quotient for Mining

	Location Net Export/ Quotient Import Role Rank			Location Net Export/ Quotient Import Role Rank		
	2000	2000	2000	1983	1983	1983
Houston	6.57	0.85	1	6.61	0.85	1
Oklahoma City	5.68	0.82	2	5.11	0.80	2
Denver	3.46	0.71	3	3.28	0.69	4
Dallas	2.54	0.61	4	NA	NA	NA
New Orleans	2.44	0.59	5	3.67	0.73	3
Fort-Worth	1.04	0.04	6	NA	NA	NA
Pittsburgh	0.73	-0.37	7	0.91	-0.09	5
San Antonio	0.70	-0.44	8	0.74	-0.35	6
St. Louis	0.42	-1.40	9	NA	NA	NA
San Francisco	0.37	-1.69	10	NA	NA	NA
Los Angeles	0.28	-2.54	11	0.36	-1.75	7
Buffalo	0.26	-2.81	12	0.18	-4.60	9
El Paso	0.25	-2.93	13	0.22	-3.62	8
Nashville	0.23	-3.28	14	NA	NA	NA
Indianapolis	0.18	-4.46	15	NA	NA	NA
Columbus	0.16	-5.07	16	NA	NA	NA
Jacksonville	0.13	-6.57	17	NA	NA	NA
Kansas City	0.12	-7.16	18	NA	NA	NA
Cleveland	0.12	-7.37	19	0.15	-5.86	10
Phoenix	0.12	-7.39	20	0.11	-7.95	11
Minneapolis	0.10	-9.14	21	NA	NA	NA
Washington, DC	0.09	-9.62	22	NA	NA	NA
Atlanta	0.09	-10.43	23	NA	NA	NA
New York	0.08	-10.86	24	NA	NA	NA
Detroit	0.08	-11.07	25	NA	NA	NA
Cincinnati	0.07	-13.43	26	NA	NA	NA
Milwaukee	0.07	-13.86	27	NA	NA	NA
Seattle	0.06	-15.43	28	0.07	-12.36	12
Chicago	0.06	-16.87	29	NA	NA	NA
San Diego	0.05	-17.21	30	0.07	-13.24	13
Philadelphia	0.05	-20.06	31	NA	NA	NA
BOSTON	0.05	-20.15	32	0.04	-22.64	14
Memphis	0.04	-23.48	33	NA	NA	NA
San Jose	0.03	-37.48	34	0.03	-35.95	15
Baltimore	0.01	-114.99	35	NA	NA	NA

Table 4D. Ranking of Metropolitan Areas on 2000 Projected Location Quotient for Retail Trade

	Location Net Export/ Quotient Import Role Rank			Location Net Export/ Quotient Import Role Rank		
	2000	2000	2000	1983	1983	1983
Fort-Worth	1.28	0.22	1	1.24	0.19	1
Phoenix	1.15	0.13	2	1.15	0.13	2
Oklahoma City	1.13	0.12	3	1.12	0.11	5
Pittsburgh	1.13	0.12	4	1.13	0.12	3
Buffalo	1.12	0.11	5	1.11	0.10	6
Cincinnati	1.11	0.10	6	1.11	0.10	8
San Antonio	1.11	0.10	7	1.11	0.10	7
Indianapolis	1.10	0.09	8	1.09	0.09	9
Nashville	1.09	0.08	9	1.02	0.02	20
Atlanta	1.08	0.07	10	1.04	0.04	16
Detroit	1.08	0.07	11	1.09	0.08	10
Memphis	1.06	0.06	12	1.05	0.05	14
Columbus	1.06	0.06	13	1.12	0.11	4
Jacksonville	1.06	0.06	14	1.05	0.05	15
New Orleans	1.05	0.05	15	1.07	0.06	13
Kansas City	1.04	0.04	16	1.04	0.04	17
Seattle	1.04	0.04	17	1.09	0.08	11
St. Louis	1.04	0.04	18	1.02	0.02	22
Minneapolis	1.03	0.03	19	1.08	0.07	12
San Diego	1.03	0.03	20	0.98	-0.02	29
Dallas	1.00	0.00	21	1.02	0.02	21
Denver	0.99	-0.01	22	1.04	0.04	18
Cleveland	0.99	-0.01	23	1.02	0.02	23
Baltimore	0.98	-0.02	24	1.03	0.03	19
Philadelphia	0.98	-0.02	25	1.00	0.00	26
Milwaukee	0.95	-0.05	26	1.01	0.01	24
Houston	0.95	-0.05	27	1.00	0.00	27
Chicago	0.95	-0.05	28	0.97	-0.04	30
San Francisco	0.94	-0.06	29	0.91	-0.09	32
BOSTON	0.93	-0.08	30	0.99	-0.01	28
El Paso	0.91	-0.09	31	1.01	0.01	25
Washington, DC	0.88	-0.14	32	0.89	-0.12	33
Los Angeles	0.87	-0.15	33	0.93	-0.07	31
San Jose	0.77	-0.29	34	0.83	-0.20	34
New York	0.65	-0.53	35	0.72	-0.39	35

Table 4E. Ranking of Metropolitan Areas on 2000 Projected Location Quotient for Services

	Location Net Export/ Quotient Import Role Rank			Location Net Export/ Quotient Import Role Rank		
	2000	2000	2000	1983	1983	1983
New York	1.36	0.27	1	1.37	0.27	1
Washington, DC	1.36	0.27	2	1.33	0.25	3
San Francisco	1.33	0.25	3	1.34	0.25	2
Philadelphia	1.23	0.18	4	1.20	0.16	7
Los Angeles	1.22	0.18	5	1.21	0.17	6
BOSTON	1.22	0.18	6	1.30	0.23	4
Milwaukee	1.20	0.17	7	1.15	0.13	10
Pittsburgh	1.20	0.17	8	1.22	0.18	5
Chicago	1.19	0.16	9	1.14	0.12	12
New Orleans	1.18	0.15	10	1.14	0.13	11
St. Louis	1.17	0.14	11	1.16	0.14	8
Buffalo	1.16	0.14	12	1.11	0.10	13
San Jose	1.15	0.13	13	1.15	0.13	9
Cleveland	1.11	0.10	14	1.09	0.08	15
Detroit	1.10	0.09	15	1.10	0.09	14
Denver	1.10	0.09	16	1.07	0.06	18
Memphis	1.09	0.08	17	1.08	0.07	17
Minneapolis	1.08	0.07	18	1.09	0.08	16
Cincinnati	1.07	0.06	19	1.07	0.06	20
Columbus	1.06	0.05	20	1.01	0.01	24
Kansas City	1.05	0.05	21	1.02	0.02	23
Baltimore	1.04	0.04	22	1.07	0.06	19
Nashville	1.04	0.04	23	NA	NA	NA
Phoenix	1.03	0.03	24	1.05	0.05	21
Jacksonville	1.03	0.03	25	1.01	0.01	25
Houston	1.02	0.02	26	1.03	0.03	22
Atlanta	1.01	0.01	27	0.99	-0.01	28
Seattle	1.00	0.00	28	1.01	0.01	26
Dallas	1.00	0.00	29	0.98	-0.02	29
San Diego	1.00	0.00	30	1.00	0.00	27
Fort-Worth	0.95	-0.05	31	0.94	-0.07	32
San Antonio	0.94	-0.06	32	0.94	-0.06	31
Indianapolis	0.93	-0.07	33	0.95	-0.06	30
Oklahoma City	0.85	-0.18	34	0.86	-0.16	33
El Paso	0.76	-0.32	35	0.77	-0.29	34

Table 4F. Ranking of Metropolitan Areas on 2000 Projected Location Quotient for Transportation

	Location Net Export/ Quotient Import Role Rank			Location Net Export/ Quotient Import Role Rank		
	2000	2000	2000	1983	1983	1983
New Orleans	1.63	0.39	1	1.73	0.42	1
Atlanta	1.57	0.36	2	1.60	0.37	3
Denver	1.44	0.30	3	1.39	0.28	6
Jacksonville	1.40	0.28	4	1.42	0.30	5
San Francisco	1.38	0.28	5	1.67	0.40	2
Memphis	1.37	0.27	6	1.32	0.24	9
New York	1.29	0.22	7	1.32	0.24	7
Kansas City	1.28	0.22	8	1.49	0.33	4
Seattle	1.28	0.22	9	1.25	0.20	11
Houston	1.26	0.21	10	1.32	0.24	8
St. Louis	1.21	0.17	11	1.28	0.22	10
Baltimore	1.17	0.14	12	NA	NA	NA
Dallas	1.15	0.13	13	1.21	0.17	12
Indianapolis	1.14	0.12	14	NA	NA	NA
Nashville	1.12	0.11	15	1.09	0.08	14
Chicago	1.10	0.09	16	1.15	0.13	13
Fort-Worth	1.05	0.05	17	1.00	0.00	21
Pittsburgh	1.04	0.04	18	1.08	0.07	16
Los Angeles	1.01	0.01	19	1.02	0.02	18
Cincinnati	0.98	-0.02	20	NA	NA	NA
Minneapolis	0.96	-0.04	21	1.09	0.08	15
El Paso	0.95	-0.05	22	1.04	0.04	17
Oklahoma City	0.95	-0.05	23	1.01	0.01	19
Milwaukee	0.94	-0.07	24	0.99	-0.01	22
Buffalo	0.93	-0.07	25	1.00	0.00	20
Cleveland	0.92	-0.09	26	0.96	-0.04	23
Phoenix	0.89	-0.13	27	0.88	-0.14	26
BOSTON	0.88	-0.13	28	0.90	-0.12	25
Columbus	0.87	-0.15	29	0.87	-0.15	27
Washington, DC	0.87	-0.15	30	NA	NA	NA
Philadelphia	0.87	-0.15	31	0.91	-0.10	24
Detroit	0.86	-0.16	32	NA	NA	NA
San Antonio	0.78	-0.28	33	0.70	-0.42	28
San Diego	0.73	-0.36	34	0.69	-0.44	29
San Jose	0.47	-1.11	35	0.58	-0.73	30

San Diego will experience a slight deterioration of their relative ranking. =

Service Industries Share of Total Employment

Service industries, comprised of Transportation and Public Utilities, Finance, Insurance and Real Estate, and Services, are projected to grow in the nation as a whole from 1983 to 2000. They amounted to 33.3 percent of total employment in 1983, and will reach 35.0 percent and 37.1 percent in 1990 and 2000 respectively (table 5).

In all metro areas in the study, service industries are projected to grow as a share of total employment. In the Boston metro area, they will grow from 40.3 percent of total employment in 1983 to 41.7 percent in 1990 and 43.2 percent in 2000. By 2000, Boston will have the 9th highest share of total employment in service industries among the 35 metro areas.

The five metro areas with the highest share of employment in service industries for 2000 are New York City, San Francisco, Washington, DC, Chicago and New Orleans. The metro areas which experience the highest percentage point increase between 1983 and 2000 are New York City, Chicago and Denver. All are areas with high shares of employment in service industries at the beginning of the period.

Table 5. Employment in Service Industries */ as Share
of Total Employment, 2000, 1990, and 1983

	2000	1990	1983	Rank in 2000
	%	%	%	
Atlanta	41.5	39.1	37.2	15
Baltimore	39.4	37.2	ERR	23
BOSTON	43.2	41.7	40.3	9
Buffalo	40.4	37.8	35.5	19
Chicago	45.2	42.3	39.7	4
Cincinnati	38.2	36.2	NA	28
Cleveland	39.3	36.8	35.3	24
Columbus	40.8	37.8	35.2	16
Dallas	40.7	38.7	37.0	17
Denver	44.3	41.4	39.1	6
Detroit	38.4	36.4	NA	26
El Paso	28.8	27.9	27.1	35
Fort Worth	34.9	32.9	31.5	33
Houston	40.2	38.4	37.0	21
Indianapolis	37.2	35.6	NA	29
Jacksonville	42.1	39.9	38.3	13
Kansas City	41.7	39.5	37.7	14
Los Angeles	43.4	41.1	39.2	7
Memphis	40.7	38.3	NA	18
Milwaukee	43.3	40.2	37.9	8
Minneapolis	40.0	38.3	37.1	22
Nashville	38.3	36.4	NA	27
New Orleans	44.7	42.2	40.6	5
New York	56.0	53.2	50.5	1
Oklahoma City	33.4	31.9	31.0	34
Philadelphia	42.9	40.4	38.2	10
Phoenix	39.2	37.1	35.7	25
Pittsburgh	42.3	40.2	38.7	12
St. Louis	42.3	40.0	38.3	11
San Antonio	35.4	33.3	31.4	32
San Diego	36.7	34.4	31.8	30
San Francisco	53.6	52.3	50.9	2
San Jose	36.5	34.5	33.0	31
Seattle	40.3	38.0	36.5	20
Washington, DC	45.2	42.4	NA	3
UNITED STATES	37.1	35.0	33.3	

Source: U.S. Department of Commerce, BEA, Regional Economic
Analysis Division, OBERS Projections

*/ Service industries include Transportation and Public
Utilities, Finance and Services. Boston Finance

SECTION THREE. EVOLUTION OF THE INDUSTRIAL STRUCTURE

In this section, the growth trends of total non-farm employment and of employment in each industrial sector are analyzed for the total time period, 1983-2000, and for two intermediate periods: 1983-1990 and 1990-2000. The growth trends are described in terms of aggregate change, total percentage change and average annual percentage change.¹³ These tables indicate where employment for a given sector has been growing fastest; they do not indicate which metro area has the largest level of employment.

The Boston Metropolitan Area

Table 6 summarizes average annual rates of growth for the Boston metropolitan area in comparison to those for the U.S. economy as a whole and for the other 34 metro areas. The average annual growth trend of Boston metropolitan total non-farm employment remains above the national trend for the whole time period and for the two intermediate periods. Among the major industrial sectors, only two have growth trends below those for the U.S. for all time periods. They are Retail Trade and Services. The relative position of the Services sector in particular worsens in the latter period, 1990-2000. The rate of

¹³ Calculated with the compound rate method which allows for comparison of growth trends across time periods of different duration. The average annual percent change is computed as follows:

$$\text{Rate} = (\sqrt[t]{E/B} - 1) * 100$$

where t=number of years in the period

B=employment level at beginning of period

E=employment level at end of period

growth of this sector is further below the U.S. trend than during the earlier period, 1983-1990. Not-surprisingly, once Services employment is excluded from total non-farm employment, the position of Boston relative to the national economy improves.

The industrial sectors for which the trend for Boston is above that for the U.S. economy are Manufacturing, Finance and, Transportation. Manufacturing had started to grow in Boston faster than in the national economy during the latter part of the historical period 1969-84.¹⁴ While manufacturing is projected to grow slower in Boston and the nation during the later period 1990-2000 than over the period 1983-1990, the growth in Boston will not slow down as fast as that of the industry in the U.S. economy and in the other metropolitan areas in the study. Boston's manufacturing employment growth rate will rank 6th above the U.S. during 1983-1990 and 9th above the U.S. during 1990-2000.

The growth rate of Finance employment in the Boston metro area remains above, but close to, the national trend for the whole period 1983-2000. Finance employment grows fastest during the earlier time period 1983-1990 both in Boston and the nation. In the later period, 1990-2000, the growth of Finance employment slows down in the Boston metro area more than in the nation. The rank of Boston's growth rate relative to other metro areas goes from 7th for 1983-1990 down to 11th for 1990-2000.

¹⁴ See Carre and Brown. BRA. November 1987.

Transportation employment also grows slower in the later period 1990-2000 than in the earlier one. The growth rate of Boston's transportation employment maintains its position relative to the U.S. trend across both time periods.

For other major industrial sectors, in which the Boston metro area is not specialized, annual rates of growth will vary. Construction employment will increase by 2.17 percent annually from 1983 to 2000, 3.70 percent from 1983 to 1990 and 1.11 percent from 1990 to 2000. Wholesale trade will grow by 1.42 percent for 1983-2000, 1.90 percent for 1983-1990 and 1.08 percent for 1990-2000.

Government employment, be it federal civilian and military, or state and local employment, constitutes a share of employment in the Boston area in both 1983 and 2000 which is relatively small compared to the share it holds in the national economy. As location quotients indicate in the previous section, the difference between Boston and the national economy will be even more pronounced in 2000 than in 1983. Low rates of employment growth account for this. From 1983 to 2000, total government employment will grow annually by 0.24 percent. It will grow by 0.28 percent for 1983-1990 and 0.21 percent for 1990-2000.

Table 6. Average Annual Change in Boston Metropolitan Employment

	Boston Average Annual Rate	Rank Among 35 Metro Areas	U.S. Average Annual Rate	Boston Rank Rel. to U.S. Average
Total non-farm employment				
1983-2000	1.78	13	1.59	+4
1983-1990	2.41	12	2.11	+3
1990-2000	1.34	13	1.22	+5
Non-farm employment, manufacturing excluded				
1983-2000	1.72	14	1.66	+1
1983-1990	2.24	13	2.10	+2
1990-2000	1.35	14	1.34	+1
Non-farm employment, services excluded				
1983-2000	1.60	12	1.35	+2
1983-1990	2.23	11	1.87	+3
1990-2000	1.16	13	0.99	+4
Finance employment*/				
1983-2000	2.44	8	2.14	+4
1983-1990	3.51	7	2.80	+3
1990-2000	1.69	11	1.68	+1
Manufacturing employment				
1983-2000	2.03	11	1.27	+7
1983-1990	3.12	10	2.15	+6
1990-2000	1.28	11	0.66	+9
Retail trade employment				
1983-2000	1.63	17	1.77	-2
1983-1990	2.07	19	2.26	-2
1990-2000	1.32	16	1.43	-1
Services employment				
1983-2000	2.19	17	2.29	-2
1983-1990	2.85	16	2.87	-1
1990-2000	1.74	21	1.89	-5
Transportation employment				
1983-2000	1.78	10	1.61	+3
1983-1990	2.29	10	2.02	+3
1990-2000	1.42	13	1.33	+3

*/ Data for the finance sector for Boston were not disclosed in this series for 1983; they were estimated following a method described in the text.

Other Metropolitan Areas

In the following section, the average annual growth rates of all the metro areas in the study are compared to the national trend. Tables 7A to 9I display rankings of metropolitan areas according to their annual growth trends in major industrial sectors. For each metro area, the tables also provide levels of employment change and total percent change. Tables 7A to 7I cover the whole time period 1983-2000, tables 8A to 8I cover the period 1983-1990, and tables 9A to 9I cover the period 1990-2000.

For total non-farm employment and for all major industrial sectors, the U.S. economy is projected to experience an average annual growth rate which is higher during the earlier period 1983-1990 than during the later one 1990-2000. In a number of sectors, and across time periods, the Phoenix metro area will rank highest in terms of average annual percentage job growth. It should be noted that this growth occurs over a job base which is small compared to the employment bases of other metropolitan areas such as New York, Philadelphia or Boston.

The total time period 1983-2000.

Total non-farm employment, 1983-2000

Highest:	Phoenix	3.43 %
U.S. average:	1.59 % with 16 metro areas above and 19 below	
Lowest:	Cleveland	0.69 %

Five metro area have annual rates of growth below 1 percent. All of them are areas surrounding old industrial cities; Cleveland, Pittsburgh, New York, Detroit, Baltimore, and Buffalo. Phoenix is the only metro area with a rate above 3 percent.

Total non-farm employment, manufacturing excluded, 1983-2000

Highest: Phoenix 3.45%
U.S. average: 1.66 % with 14 metro areas above and 21 below
Lowest: Cleveland 0.85 %

Once manufacturing employment is excluded, metro areas at the bottom of the ranking have higher rates of growth. Metro areas at the top of the ranking for total non-farm employment experience little change in annual growth once manufacturing employment is excluded, indicating that the rest of their economy will grow at about the same rate as manufacturing.

Total non-farm employment, services excluded, 1983-2000

Highest: Phoenix 3.21 %
U.S. average: 1.35% with 13 metro areas above and 21 below
Lowest: Cleveland 0.39 %

All metro areas in the study will do worse in the absence of the growth of services employment. Fifteen metro areas would have annual growth rates below 1 percent if services employment were excluded.

Finance employment, 1983-2000

Highest: Phoenix 3.86 %
U.S. average: 2.14 % with 11 metro areas above and 22 below
Lowest: Detroit 0.97 %

A large number of the metro areas in this study have growth rates of Finance employment which fall below the national trend. This may indicate that areas outside the metro areas of the largest cities may experience more growth in Finance employment. Most areas in the study will experience moderate annual growth; 20 metro areas have rates below 1 percent and only 3 metro areas have rates above 3 percent. San Francisco, New York, Los

Angeles, and Chicago will have low rates of growth even though they are cities with high location quotients. They will remain metro areas with a relatively large share of their employment in the Finance sector even if its employment is not growing at high rates.

Manufacturing employment, 1983-2000

Highest:	Phoenix	3.30 %
U.S. average:	1.27 % with 17 metro areas above and 18 below	
Lowest:	New York	-0.68 %

Of all sectors, manufacturing displays the greatest spread of growth rates. Two metro areas show an employment decline; New York with -0.68 percent, and Buffalo with -0.01 percent. Many metro areas are projected to experience moderate growth; sixteen areas have rates below 1 percent.

Retail trade employment, 1983-2000

Highest:	Phoenix	3.69 %
U.S. average:	1.77 % with 15 above and 20 below	
Lowest:	New York	0.48 %

Most metro areas in the study experience moderate growth in retail trade employment. Twenty areas have rates greater than, or equal to, 1 percent but less than 2 percent.

Services employment, 1983-2000

Highest:	Phoenix	4.09 %
U.S. average:	2.29 % with 15 above and 19 below	
Lowest:	Pittsburgh	1.44 %

Services employment growth is projected to remain fairly high across all metro areas in the study. The highest and lowest rates are greater than their counterparts for the other major

industrial sectors. Twenty areas have rates between 2 and 3 percent.

The time period 1983-1990

Total non-farm employment, 1983-1990

Highest:	Phoenix	4.46 %
U.S. average:	2.11 % with 14 above and 21 below	
Lowest:	New York	0.98 %

During this time period, all metro areas in the study display higher rates of growth than for the total period 1983-2000 indicating that it is during this earlier part of the whole period that most of the employment growth will take place. This is true for all major industrial sectors as well, as seen below.

Total non-farm employment, manufacturing excluded, 1983-1990

Highest:	Phoenix	4.46 %
U.S. average:	2.10 % with 14 above and 21 below	
Lowest:	Cleveland	1.15 %

During this time period, employment in the Phoenix area grows as fast with or without manufacturing. The metro areas at the bottom of the ranking have higher rates once manufacturing is excluded. Most areas still have rates between 1 and 3 percent. Only 4 metro areas have rates above 3 percent with or without manufacturing.

Total non-farm employment, services excluded, 1983-1990

Highest:	Phoenix	4.24 %
U.S. average:	1.87 % with 13 above and 21 below	
Lowest:	New York	0.58 %

Once services employment is excluded all metro areas do worse.

Eight metro areas have rates below 1 percent, as compared to one metro area if total employment is considered.

Finance employment, 1983-1990

Highest:	San Diego 5.43 %
U.S. average:	2.80 % with 9 above and 24 below
Lowest:	New Orleans 1.31 %

Only 9 metro areas have rates above the U.S. trend. Fourteen metro areas have rates greater than 2 but less than 3 percent.

Manufacturing employment, 1983-1990

Highest:	Phoenix 4.47 %
U.S. average:	2.15 % with 15 above and 20 below
Lowest:	New York -0.45 %

New York is the only area with a manufacturing employment decline during this period.

Retail Trade employment, 1983-1990

Highest:	Phoenix 4.87 %
U.S. average:	2.26 % with 17 above and 18 below
Lowest:	New York 0.47 %

Phoenix is the only metro area with a rate above 4 percent.

Fifteen metro areas have rates at, or above, 2 percent and less than 3 percent.

Services employment, 1983-1990

Highest:	Phoenix 5.13 %
U.S. average:	2.87 % with 15 above and 19 below
Lowest:	New York 1.86 %

All metro areas experience at least moderate growth in service employment. Only 4 areas have rates below 2 percent and only 4 have rates above 4 percent. Most experience annual growth rates between 2 and 3 percent.

The 1990-2000 time period

~~U.S.~~ Total non-farm employment, 1990-2000

Highest:	Phoenix	2.72 %
U.S. average:	1.22 % with 17 above and 18 below	
Lowest:	Detroit	0.37 %

For total non-farm employment and for all major sectors, annual employment growth rates are lower during this later period than during the earlier one, 1983-1990.

Total non-farm employment, manufacturing excluded, 1990-2000

Highest:	Phoenix	2.76 %
U.S. average:	1.34 % with 14 above and 21 below	
Lowest:	Detroit	0.54 %

All metro areas have higher rates of growth of employment if manufacturing employment is excluded. The metro area which ranks highest on total employment, Phoenix, has only slightly higher employment growth in the absence of manufacturing. The one which ranks lowest, Detroit, does experience higher growth but remains last. The relative position of most metro areas changes little once manufacturing is excluded.

Total non-farm employment, services excluded, 1990-2000

Highest:	Phoenix	2.49 %
U.S. average:	0.99 % with 16 above and 19 below	
Lowest:	Cleveland	0.08 %

All metro areas experience lower rates of employment growth once services employment is excluded. Relative rankings of metro areas change little indicating that all areas benefit uniformly from services employment growth.

Finance employment, 1990-2000

Highest:	Phoenix	3.08 %
U.S. average:	1.68 % with 11 above and 24 below	

Lowest: Detroit 0.51 %

Growth rates for Finance employment are substantially lower during this period than in the earlier one. Twenty-four metro areas have growth rates between 1 and 2 percent. Five metro areas have rates below 1 percent. The relative position of some metro areas improves substantially. For instance, Los Angeles ranks 19th in this period as compared to 30th in the previous period.

Manufacturing employment, 1990-2000

Highest: Phoenix 2.50 %
U.S. average: 0.66 % with 18 above and 17 below
Lowest: New York -0.84 %

Manufacturing employment does substantially worse in this period than in the previous one. Nine metro areas experience employment declines. They include: New York, Cleveland, Buffalo, Chicago, Pittsburgh, Philadelphia, Detroit, St. Louis, and Baltimore. Only Phoenix will have an annual rate of growth above 2 percent. Fifteen metro areas will have rates below 1 percent.

Retail trade employment, 1990-2000

Highest: Phoenix 2.87 %
U.S. average: 1.43 % with 15 above and 20 below
Lowest: New York 0.48 %

The lowest rate of growth is at the same level in this period as in the previous one, and for the same metro area, whereas the highest rate is substantially lower than in the previous period. Only 5 metro areas have rates above 2 percent.

Services employment, 1990-2000

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Highest: Phoenix 3.37 %
U.S. average: 1.89 % with 16 above and 18 below
Lowest: Detroit 1.11 %

Compared to the earlier period, services employment grows less fast in this period. Eighteen metro areas have rates at or below 1.85 percent which is close to the lowest rate for the earlier period. Phoenix is the only metro area with a rate above 3 percent. The areas with lowest Services growth are areas which have a economic base of traditional manufacturing activities. Conversely, the areas of high Services growth are among those sun-belt areas with high growth in Manufacturing and in total employment.

Table 7A. Ranking of Metropolitan Areas on Average Annual
Percentage Change in Total Non-farm Employment;
1983-2000

	AvgAnn % Change	Rank	Rank Rel. to U.S.	Total Change (000'S)	Total % Change
Phoenix	3.43	1	16	598.5	77.49
San Jose	2.70	2	15	459.5	57.28
San Diego	2.44	3	14	465.2	50.56
Houston	2.40	4	13	786.8	49.66
Denver	2.38	5	12	428.0	49.24
Seattle	2.18	6	11	385.3	44.31
Atlanta	2.09	7	10	517.1	42.05
Fort Worth	2.06	8	9	206.3	41.54
Dallas	1.95	9	8	489.5	38.86
Minneapolis-St. Paul	1.93	10	7	458.7	38.48
Nashville	1.91	11	6	163.6	37.88
Oklahoma City	1.85	12	5	177.0	36.49
BOSTON	1.78	13	4	720.2	34.97
San Antonio	1.62	14	3	164.0	31.32
Jacksonville	1.60	15	2	117.2	31.01
Columbus	1.59	16	1	185.7	30.86
UNITED STATES	1.59			31596.0	30.68
Washington, DC	1.58	17	-1	596.8	30.55
San Francisco	1.50	18	-2	289.8	28.84
El Paso	1.48	19	-3	57.0	28.41
Los Angeles	1.33	20	-4	1006.0	25.20
Indianapolis	1.27	21	-5	136.7	23.88
Cincinnati	1.25	22	-6	149.2	23.49
Memphis	1.25	22	-6	100.8	23.41
Kansas City	1.21	24	-8	163.3	22.68
St. Louis	1.16	25	-9	246.9	21.71
New Orleans	1.07	26	-10	118.6	19.80
Chicago	1.01	27	-11	555.6	18.71
Philadelphia	1.00	28	-12	393.5	18.46
Milwaukee	1.00	28	-12	126.0	18.41
Buffalo	0.94	30	-14	72.8	17.15
Baltimore	0.91	31	-15	181.0	16.72
Detroit	0.85	32	-16	265.0	15.50
New York	0.79	33	-17	606.0	14.40
Pittsburgh	0.78	34	-18	129.9	14.21
Cleveland	0.69	35	-19	111.4	12.44

Table 7B. Ranking of Metropolitan Areas on Average Annual
Change in Non-farm Employment, Manufacturing Excluded.
1983-2000

	AvgAnn %	Rank	Rank Rel. to U.S.	Total Change (000's)	Total %
	Change				Change
Phoenix	3.45	1	14	514.0	78.14
San Jose	2.70	2	13	304.7	57.23
Denver	2.49	3	12	402.6	52.00
San Diego	2.38	4	11	398.1	49.18
Houston	2.36	5	10	682.6	48.74
Seattle	2.20	6	9	320.4	44.81
Atlanta	2.18	7	8	472.4	44.33
Fort Worth	2.14	8	7	170.9	43.27
Dallas	1.99	9	6	416.7	39.81
Nashville	1.97	10	5	137.8	39.33
Minneapolis	1.90	11	4	357.9	37.69
Oklahoma City	1.73	12	3	147.6	33.95
Columbus	1.73	13	2	170.0	33.86
BOSTON	1.72	14	1	552.8	33.52
UNITED STATES	1.66			27,097.0	32.20
Jacksonville	1.63	15	-1	109.1	31.66
San Francisco	1.57	16	-2	277.4	30.37
Washington, D.C.	1.54	17	-3	558.5	29.69
San Antonio	1.52	18	-4	138.3	29.31
Los Angeles	1.42	19	-5	845.6	27.14
Cincinnati	1.37	20	-6	127.9	25.92
Memphis	1.33	21	-7	93.7	25.27
St. Louis	1.31	22	-8	227.8	24.73
Indianapolis	1.30	23	-9	113.8	24.50
Kansas City	1.29	24	-10	148.0	24.41
Chicago	1.23	25	-11	547.5	23.05
El Paso	1.19	26	-12	36.6	22.28
Philadelphia	1.18	27	-13	384.0	22.13
Buffalo	1.14	28	-14	73.0	21.29
Milwaukee	1.13	29	-15	109.6	21.09
New Orleans	1.06	30	-16	107.6	19.63
New York	0.98	31	-17	664.9	18.13
Baltimore	0.96	32	-18	166.4	17.59
Detroit	0.93	33	-19	218.5	16.95
Pittsburgh	0.90	34	-20	123.8	16.41
Cleveland	0.85	35	-21	105.6	15.40

Table 7C. Ranking of Metropolitan Areas on Average Annual
Change in Non-farm Employment, Services Excluded.
1983-2000

	AvgAnn %	Rank	Rank Rel. to U.S.	Total Change (000's)	Total %
Phoenix	3.21	1	13	417.5	71.11
San Jose	2.39	2	12	293.4	49.48
San Diego	2.20	3	11	317.3	44.70
Houston	2.16	4	10	532.5	43.90
Denver	2.05	5	9	271.3	41.20
Seattle	1.95	6	8	260.1	38.78
Fort Worth	1.83	7	7	140.4	36.00
Atlanta	1.79	8	6	336.3	35.26
Minneapolis	1.69	9	5	293.9	32.88
Dallas	1.67	10	4	318.7	32.55
Oklahoma City	1.67	11	3	126.4	32.48
BOSTON	1.60	12	2	450.3	30.96
San Antonio	1.39	13	1	108.8	26.47
UNITED STATES	1.35			20,226.0	25.66
El Paso	1.34	14	-1	42.0	25.41
Jacksonville	1.31	15	-2	72.1	24.73
Columbus	1.25	16	-3	108.5	23.50
San Francisco	1.16	17	-4	150.9	21.58
Washington, D.C.	1.14	18	-5	289.4	21.22
Indianapolis	1.07	19	-6	88.9	19.86
Cincinnati	0.99	20	-7	87.3	18.18
Los Angeles	0.98	21	-8	525.1	18.12
Memphis	0.97	22	-9	57.6	17.78
Kansas City	0.90	23	-10	90.6	16.45
St. Louis	0.85	24	-11	129.0	15.43
Baltimore	0.71	25	-12	104.0	12.69
New Orleans	0.70	26	-13	56.1	12.64
Philadelphia	0.63	27	-14	173.9	11.22
Chicago	0.60	28	-15	237.8	10.79
Milwaukee	0.59	29	-16	53.2	10.52
Detroit	0.58	30	-17	132.0	10.30
Buffalo	0.55	31	-18	31.0	9.78
Pittsburgh	0.51	32	-19	60.2	9.12
New York	0.43	33	-20	220.7	7.59
Cleveland	0.39	34	-21	45.7	6.78
Nashville	NA			NA	NA

Table 7D. Ranking of Metropolitan Areas on Average Annual
Percentage Change in Finance Employment;
1983-2000

	AvgAnn % Change	Rank	Rank Rel. to U.S.	Total Change (000'S)	Total % Change
Phoenix	3.86	1	11	53.9	90.44
San Diego	3.84	2	10	49.0	89.91
San Jose	3.00	3	9	22.2	65.29
Denver	2.93	4	8	44.3	63.29
Houston	2.71	5	7	65.5	57.51
Seattle	2.69	6	6	37.6	57.14
Atlanta	2.56	7	5	46.3	53.59
BOSTON */	2.44	8	4	68.7	50.63
Columbus	2.40	9	3	24.6	49.70
San Antonio	2.17	10	2	15.4	44.13
Minneapolis	2.16	11	1	37.6	43.77
UNITED STATES	2.14			2676.0	43.38
Dallas	2.14	12	-1	49.1	43.26
Fort Worth	2.03	13	-2	10.8	40.75
Oklahoma City	1.95	14	-3	12.6	38.77
Kansas City	1.91	15	-4	20.4	37.99
Jacksonville	1.71	16	-5	10.8	33.33
El Paso	1.66	17	-6	2.9	32.22
St. Louis	1.62	18	-7	21.0	31.34
Nashville	1.59	19	-8	8.4	30.77
Baltimore	1.56	20	-9	19.9	30.20
San Francisco	1.56	21	-10	37.4	30.14
Buffalo	1.49	22	-11	6.6	28.57
Milwaukee	1.49	22	-11	13.9	28.54
Chicago	1.44	24	-13	68.3	27.60
New York	1.44	24	-13	150.5	27.52
Cincinnati	1.44	24	-13	10.0	27.47
Los Angeles	1.44	24	-13	74.4	27.42
Pittsburgh	1.34	28	-17	13.3	25.33
Philadelphia	1.32	29	-18	35.6	25.02
New Orleans	1.16	30	-19	8.0	21.74
Indianapolis	1.15	31	-20	9.5	21.54
Cleveland	1.02	32	-21	10.0	18.76
Detroit	0.97	33	-22	17.4	17.85
Memphis	NA			NA	NA
Washington. DC	NA			NA	NA

Table 7E. Ranking of Metropolitan Areas on Average Annual
Percentage Change in Manufacturing Employment;
1983-2000

	AvgAnn % Change	Rank	Rank Rel. to U.S.	Total Change (000'S)	Total % Change
Phoenix	3.30	1	17	84.5	73.73
San Diego	2.83	2	16	67.1	60.61
Oklahoma City	2.74	3	15	29.4	58.45
San Jose	2.70	4	14	154.8	57.38
Houston	2.68	5	13	104.2	56.66
El Paso	2.66	6	12	20.4	56.20
Washington, DC	2.52	7	11	38.3	52.75
San Antonio	2.40	8	10	25.7	49.61
Seattle	2.08	9	9	64.9	42.01
Minneapolis	2.07	10	8	100.8	41.57
BOSTON	2.03	11	7	167.4	40.77
Fort Worth	1.77	12	6	35.4	34.84
Dallas	1.75	13	5	72.8	34.21
Nashville	1.63	14	4	25.8	31.66
Atlanta	1.43	15	3	44.7	27.22
Denver	1.40	16	2	25.4	26.74
Jacksonville	1.29	17	1	8.1	24.25
UNITED STATES	1.27			4499.0	23.90
New Orleans	1.16	18	-1	11.0	21.65
Indianapolis	1.14	19	-2	22.9	21.20
Los Angeles	0.99	20	-3	160.4	18.32
Columbus	0.86	21	-4	15.7	15.75
Cincinnati	0.83	22	-5	21.3	15.03
San Francisco	0.75	23	-6	12.4	13.57
Kansas City	0.75	23	-6	15.3	13.47
Memphis	0.66	25	-8	7.1	11.89
Detroit	0.62	26	-9	46.5	11.04
Baltimore	0.60	27	-10	14.6	10.67
Milwaukee	0.56	28	-11	16.4	9.95
St. Louis	0.50	29	-12	19.1	8.84
Pittsburgh	0.22	30	-13	6.1	3.82
Cleveland	0.16	31	-14	5.8	2.77
Philadelphia	0.14	32	-15	9.5	2.40
Chicago	0.08	33	-16	8.1	1.37
Buffalo	-0.01	34	-17	-0.2	-0.25
New York	-0.68	35	-18	-58.9	-10.93

Table 7F. Ranking of Metropolitan Areas on Average Annual
Percentage Change in Retail Trade Employment;
1983-2000

	AvgAnn % Change	Rank	Rank Rel. to U.S.	Total Change (000'S)	Total % Change
Phoenix	3.69	1	15	123.4	85.16
San Diego	2.91	2	14	93.4	62.98
Atlanta	2.51	3	13	109.7	52.46
Fort Worth	2.48	4	12	52.0	51.74
San Jose	2.47	5	11	55.9	51.33
Nashville	2.46	6	10	38.0	51.21
Houston	2.35	7	9	124.2	48.44
Denver	2.33	8	8	70.7	48.03
Seattle	2.16	9	7	67.2	43.75
Oklahoma City	2.14	10	6	38.6	43.27
Dallas	2.03	11	5	85.5	40.77
San Francisco	1.93	12	4	57.1	38.32
Jacksonville	1.91	13	3	24.5	37.93
Minneapolis	1.90	14	2	79.8	37.82
San Antonio	1.83	15	1	34.3	36.18
UNITED STATES	1.77			6015.0	34.80
Washington, DC	1.72	16	-1	95.3	33.59
BOSTON	1.63	17	-2	104.6	31.64
Indianapolis	1.52	18	-3	30.2	29.26
Memphis	1.52	18	-3	21.8	29.26
St. Louis	1.50	20	-5	54.6	28.74
Cincinnati	1.49	21	-6	32.9	28.61
Columbus	1.48	22	-7	31.6	28.34
Kansas City	1.41	23	-8	33.4	26.96
New Orleans	1.24	24	-9	24.1	23.31
Buffalo	1.21	25	-10	17.5	22.76
Chicago	1.15	26	-11	99.4	21.42
Los Angeles	1.12	27	-12	126.0	20.87
El Paso	1.11	28	-13	6.8	20.61
Philadelphia	1.09	29	-14	70.2	20.20
Pittsburgh	1.01	30	-15	31.3	18.56
Detroit	1.00	31	-16	56.2	18.47
Milwaukee	0.85	32	-17	17.4	15.38
Baltimore	0.84	33	-18	27.8	15.29
Cleveland	0.77	34	-19	20.7	14.00
New York	0.48	35	-20	41.0	8.39

Table 7G. Ranking of Metropolitan Areas on Average Annual
Percentage Change in Services Employment;
1983-2000

	AvgAnn % Change	Rank	Rank Rel. to U.S.	Total Change (000'S)	Total % Change
Phoenix	4.09	1	15	181.0	97.68
San Jose	3.50	2	14	166.1	79.40
Denver	3.32	3	13	156.7	74.34
San Diego	3.18	4	12	147.9	70.36
Houston	3.12	5	11	254.3	68.49
Atlanta	3.01	6	10	180.8	65.53
Seattle	2.91	7	9	125.2	62.98
Fort Worth	2.87	8	8	65.9	61.82
Dallas	2.84	9	7	170.8	60.91
Minneapolis	2.62	10	5	164.8	55.25
Columbus	2.62	10	5	77.2	55.18
Oklahoma City	2.53	12	4	50.6	52.82
Jacksonville	2.50	13	2	45.1	52.14
Washington, DC	2.50	13	2	307.4	52.13
San Antonio	2.37	15	1	55.2	48.98
UNITED STATES	2.29			11370.0	47.05
San Francisco	2.23	16	-1	138.9	45.50
BOSTON	2.19	17	-2	269.9	44.59
Los Angeles	2.17	18	-3	480.9	44.00
Kansas City	2.13	19	-4	72.7	42.99
El Paso	2.10	20	-5	15.0	42.49
Chicago	2.07	21	-6	317.8	41.59
Milwaukee	2.03	22	-7	72.8	40.74
Memphis	2.02	23	-8	43.2	40.53
New Orleans	2.01	24	-9	62.5	40.30
Cincinnati	2.00	25	-10	61.9	39.99
St. Louis	1.96	26	-11	117.9	39.17
Buffalo	1.95	27	-12	41.8	38.92
Indianapolis	1.93	28	-13	47.8	38.33
Philadelphia	1.90	29	-14	219.6	37.80
Detroit	1.60	30	-15	133.0	31.00
Cleveland	1.54	31	-16	65.7	29.67
New York	1.54	31	-16	385.3	29.63
Baltimore	1.52	33	-18	77.0	29.26
Pittsburgh	1.44	34	-19	69.7	27.44
Nashville	NA			NA	NA

Table 7H. Ranking of Metropolitan Areas on Average Annual
Percentage Change in Transportation Employment;
1983-2000

	AvgAnn % Change	Rank	Rank Rel. to U.S.	Total Change (000'S)	Total % Change
Phoenix	3.53	1	12	27.5	80.41
San Diego	2.85	2	11	19.7	61.37
Denver	2.67	3	10	34.1	56.55
Fort Worth	2.44	4	9	12.6	50.60
Seattle	2.37	5	8	26.6	48.81
San Antonio	2.32	6	7	8.8	47.57
Houston	2.20	7	6	46.7	44.73
Nashville	2.13	8	5	10.4	42.98
Atlanta	2.07	9	4	41.0	41.75
BOSTON	1.78	10	3	32.1	34.89
Dallas	1.71	11	2	25.6	33.51
Columbus	1.64	12	1	8.5	31.95
UNITED STATES	1.61			1661.0	31.26
San Jose	1.58	13	-1	7.1	30.60
Jacksonville	1.58	13	-1	8.2	30.48
Memphis	1.56	15	-3	8.6	30.07
Oklahoma City	1.53	16	-4	7.3	29.44
Los Angeles	1.33	17	-5	51.2	25.16
Minneapolis	1.26	18	-6	15.6	23.82
El Paso	1.04	19	-7	2.0	19.23
St. Louis	0.88	20	-8	11.8	16.12
Chicago	0.84	21	-9	25.8	15.23
Philadelphia	0.80	22	-10	14.2	14.59
New Orleans	0.79	23	-11	7.4	14.31
Milwaukee	0.77	24	-12	4.7	13.91
New York	0.72	25	-13	35.9	13.00
Pittsburgh	0.65	26	-14	5.7	11.59
Buffalo	0.60	27	-15	2.3	10.80
Cleveland	0.50	28	-16	3.8	8.86
San Francisco	0.45	29	-17	6.6	7.89
Kansas City	0.36	30	-18	3.4	6.27
Detroit	NA			NA	NA
Washington, DC	NA			NA	NA
Cincinnati	NA			NA	NA
Indianapolis	NA			NA	NA
Baltimore	NA			NA	NA

Table 8A. Ranking of Metropolitan Areas on Average Annual Percentage Change in Total Non-farm Employment; 1983-1990

	AvgAnn % Change	Rank	Rank Rel. to U.S.	Total Change (000'S)	Total % Change
Phoenix	4.46	1	14	276.0	35.73
San Jose	3.76	2	13	236.8	29.52
San Diego	3.27	3	12	232.8	25.30
Houston	3.23	4	11	394.5	24.90
Seattle	2.99	5	10	198.9	22.88
Denver	2.85	6	9	189.2	21.76
Atlanta	2.78	7	8	260.5	21.18
Fort Worth	2.77	8	7	104.7	21.08
Minneapolis-St. Paul	2.60	9	6	234.6	19.68
Nashville	2.58	10	5	84.4	19.54
Dallas	2.55	11	4	242.9	19.28
BOSTON	2.41	12	3	374.4	18.18
Oklahoma City	2.38	13	2	87.0	17.94
Columbus	2.27	14	1	102.4	17.02
UNITED STATES	2.11			16214.0	15.74
Washington, DC	2.10	15	-1	306.2	15.67
San Antonio	2.02	16	-2	78.8	15.05
Jacksonville	2.01	17	-3	56.5	14.95
Indianapolis	1.95	18	-4	82.7	14.45
San Francisco	1.85	19	-5	137.9	13.73
El Paso	1.85	19	-5	27.4	13.66
Cincinnati	1.84	21	-7	86.7	13.65
Kansas City	1.69	22	-8	89.8	12.47
St. Louis	1.68	23	-9	140.5	12.35
Los Angeles	1.64	24	-10	482.9	12.10
Memphis	1.61	25	-11	50.9	11.82
Detroit	1.54	26	-12	193.7	11.33
Philadelphia	1.42	27	-13	221.8	10.41
Chicago	1.36	28	-14	293.3	9.88
Milwaukee	1.33	29	-15	66.4	9.70
Baltimore	1.33	29	-15	104.5	9.65
New Orleans	1.24	31	-17	53.8	8.98
Buffalo	1.23	32	-18	37.9	8.93
Pittsburgh	1.19	33	-19	78.8	8.62
Cleveland	1.12	34	-20	72.4	8.09
New York	0.98	35	-21	298.7	7.10

Table 8B. Ranking of Metropolitan Areas on Average Annual
Change in Non-farm Employment, Manufacturing Excluded,
1983-1990

	AvgAnn % Change	Rank	Rank Rel. to U.S.	Total Change (000's)	Total % Change
Phoenix	4.46	1	14	235.0	35.73
San Jose	3.54	2	13	147.0	27.61
Houston	3.12	3	12	335.9	23.98
San Diego	3.12	4	11	193.9	23.96
Seattle	2.95	5	10	161.1	22.53
Denver	2.94	6	9	174.3	22.51
Atlanta	2.85	7	8	231.7	21.74
Fort Worth	2.74	8	7	82.2	20.81
Nashville	2.55	9	6	67.5	19.26
Dallas	2.53	10	5	200.0	19.11
Minneapolis	2.47	11	4	176.8	18.62
Columbus	2.34	12	3	88.1	17.55
BOSTON	2.24	13	2	276.0	16.74
Oklahoma City	2.17	14	1	70.4	16.20
UNITED STATES	2.10			13,199.0	15.68
Washington, D.C.	2.01	15	-1	281.5	14.96
Jacksonville	2.00	16	-2	51.3	14.89
San Francisco	1.92	17	-3	130.1	14.25
Indianapolis	1.91	18	-4	65.7	14.15
Cincinnati	1.85	19	-5	67.6	13.70
San Antonio	1.84	20	-6	64.3	13.63
St. Louis	1.76	21	-7	119.8	13.00
Kansas City	1.73	22	-8	77.3	12.75
Los Angeles	1.67	23	-9	383.4	12.31
Memphis	1.67	24	-10	45.5	12.27
Philadelphia	1.58	25	-11	201.5	11.61
Chicago	1.52	26	-12	264.9	11.15
Detroit	1.49	27	-13	140.1	10.87
Buffalo	1.40	28	-14	35.1	10.24
El Paso	1.40	29	-15	16.8	10.23
Milwaukee	1.33	30	-16	50.2	9.66
Baltimore	1.30	31	-17	89.3	9.44
Pittsburgh	1.24	32	-18	68.1	9.03
New Orleans	1.19	33	-19	47.2	8.61
New York	1.19	34	-20	315.6	8.60
Cleveland	1.15	35	-21	56.9	8.30

Table 8C. Ranking of Metropolitan Areas on Average Annual
Change in Non-farm Employment, Services Excluded.
1983-1990

	AvgAnn % Change	Rank	Rank Rel. to U.S.	Total Change (000's)	Total % Change
Phoenix	4.24	1	13	198.3	33.78
San Jose	3.42	2	12	157.4	26.54
San Diego	2.99	3	11	162.7	22.92
Houston	2.97	4	10	276.3	22.78
Seattle	2.76	5	9	140.9	21.01
Fort Worth	2.54	6	8	75.0	19.23
Denver	2.49	7	7	123.9	18.82
Atlanta	2.47	8	6	177.9	18.65
Minneapolis	2.35	9	5	157.6	17.63
Dallas	2.24	10	4	164.4	16.79
BOSTON	2.23	11	3	243.0	16.71
Oklahoma City	2.21	12	2	64.2	16.50
Columbus	1.92	13	1	65.7	14.23
UNITED STATES	1.87			10,913.0	13.84
San Antonio	1.78	14	-1	54.0	13.14
Indianapolis	1.74	15	-2	57.6	12.87
El Paso	1.71	16	-3	20.8	12.58
Jacksonville	1.70	17	-4	36.5	12.52
Cincinnati	1.59	18	-5	56.2	11.70
Washington, D.C.	1.59	19	-6	159.3	11.68
San Francisco	1.41	20	-7	71.9	10.28
St. Louis	1.35	21	-8	82.3	9.84
Kansas City	1.34	22	-9	54.0	9.80
Memphis	1.32	23	-10	31.2	9.63
Detroit	1.28	24	-11	119.3	9.31
Los Angeles	1.25	25	-12	264.3	9.12
Baltimore	1.15	26	-13	68.0	8.30
Philadelphia	0.99	27	-14	110.9	7.15
Pittsburgh	0.90	28	-15	42.9	6.50
Milwaukee	0.90	29	-16	32.8	6.49
Chicago	0.88	30	-17	139.6	6.33
New Orleans	0.87	31	-18	27.8	6.26
Cleveland	0.82	32	-19	39.8	5.91
Buffalo	0.78	33	-20	17.8	5.61
New York	0.58	34	-21	119.8	4.12
Nashville	NA			NA	NA

Table 8D. Ranking of Metropolitan Areas on Average Annual
Percentage Change in Finance Employment;
1983-1990

	AvgAnn % Change	Rank	Rank Rel. to U.S.	Total Change (000'S)	Total % Change
San Diego	5.43	1	9	24.4	44.77
Phoenix	4.99	2	8	24.2	40.60
San Jose	4.05	3	7	10.9	32.06
Seattle	3.69	4	6	19.0	28.88
Houston	3.61	5	5	32.1	28.18
Denver	3.54	6	4	19.3	27.57
BOSTON */	3.51	7	3	37.1	27.34
Columbus	3.46	8	2	13.3	26.87
Atlanta	3.40	9	1	22.8	26.39
UNITED STATES	2.80			1316.0	21.33
Minneapolis-St. Paul	2.80	10	-1	18.3	21.30
San Antonio	2.79	11	-2	7.4	21.20
Dallas	2.72	12	-3	23.5	20.70
Fort Worth	2.64	13	-4	5.3	20.00
Kansas City	2.52	14	-5	10.2	18.99
Oklahoma City	2.34	15	-6	5.7	17.54
St. Louis	2.23	16	-7	11.2	16.72
El Paso	2.23	16	-8	1.5	16.67
Nashville	2.16	18	-9	4.4	16.12
Baltimore	2.08	19	-10	10.2	15.48
Jacksonville	2.07	20	-11	5.0	15.43
Cincinnati	2.07	20	-12	5.6	15.38
San Francisco	2.05	22	-13	18.9	15.23
Buffalo	1.98	23	-14	3.4	14.72
Milwaukee	1.94	24	-15	7.0	14.37
Pittsburgh	1.90	25	-16	7.4	14.10
New York	1.89	26	-17	76.4	13.97
Chicago	1.85	27	-18	33.8	13.66
Philadelphia	1.81	28	-19	19.0	13.35
Indianapolis	1.72	29	-20	5.6	12.70
Los Angeles	1.68	30	-21	33.5	12.35
Detroit	1.63	31	-22	11.7	12.00
Cleveland	1.44	32	-23	5.6	10.51
New Orleans	1.31	33	-24	3.5	9.51
Memphis	NA			NA	NA
Washington, DC	NA			NA	NA

Table 8E. Ranking of Metropolitan Areas on Average Annual
Percentage Change in Manufacturing Employment;
1983-1990

	AvgAnn % Change	Rank	Rank Rel. to U.S.	Total Change (000'S)	Total % Change
Phoenix	4.47	1	15	41.0	35.78
San Diego	4.40	2	14	38.9	35.14
Washington, DC	4.27	3	13	24.7	34.02
San Jose	4.19	4	12	89.8	33.28
Oklahoma City	4.16	5	11	16.6	33.00
Houston	4.03	6	10	58.6	31.87
El Paso	3.73	7	9	10.6	29.20
San Antonio	3.59	8	8	14.5	27.99
Seattle	3.18	9	7	37.8	24.47
BOSTON	3.12	10	6	98.4	23.96
Minneapolis-St. Paul	3.10	11	5	57.8	23.84
Fort Worth	2.90	12	4	22.5	22.15
Nashville	2.73	13	3	16.9	20.74
Dallas	2.66	14	2	42.9	20.16
Atlanta	2.34	15	1	28.8	17.54
UNITED STATES	2.15			3015.0	16.02
Indianapolis	2.11	16	-1	17.0	15.74
Denver	2.10	17	-2	14.9	15.68
Jacksonville	2.09	18	-3	5.2	15.57
Columbus	1.93	19	-4	14.3	14.34
Cincinnati	1.82	20	-5	19.1	13.48
New Orleans	1.76	21	-6	6.6	12.99
Detroit	1.73	22	-7	53.6	12.73
Los Angeles	1.55	23	-8	99.5	11.36
Baltimore	1.52	24	-9	15.2	11.11
Kansas City	1.50	25	-10	12.5	11.00
Milwaukee	1.35	26	-11	16.2	9.83
St. Louis	1.32	27	-12	20.7	9.58
Memphis	1.24	28	-13	5.4	9.05
San Francisco	1.18	29	-14	7.8	8.53
Cleveland	1.02	30	-15	15.5	7.39
Pittsburgh	0.93	31	-16	10.7	6.70
Philadelphia	0.72	32	-17	20.3	5.13
Chicago	0.67	33	-18	28.4	4.79
Buffalo	0.48	34	-19	2.8	3.43
New York	-0.45	35	-20	-16.9	-3.14

Table 8F. Ranking of Metropolitan Areas on Average Annual
Percentage Change in Retail Trade Employment;
1983-1990

	AvgAnn % Change	Rank	Rank Rel. to U.S.	Total Change (000'S)	Total % Change
Phoenix	4.87	1	17	57.2	39.48
San Diego	3.85	2	16	44.9	30.28
Fort Worth	3.35	3	15	26.1	25.97
Atlanta	3.33	4	14	53.9	25.78
Houston	3.15	5	13	62.1	24.22
San Jose	3.14	6	12	26.3	24.15
Nashville	3.07	7	11	17.5	23.58
Seattle	2.81	8	10	32.9	21.42
Denver	2.75	9	9	30.8	20.92
Oklahoma City	2.72	10	8	18.4	20.63
Dallas	2.65	11	7	42.2	20.12
Minneapolis-St. Paul	2.56	12	6	40.8	19.34
Jacksonville	2.50	13	5	12.2	18.89
San Antonio	2.36	14	4	16.8	17.72
Indianapolis	2.31	15	2	17.9	17.34
San Francisco	2.31	15	2	25.8	17.32
Washington, DC	2.30	17	1	49.0	17.27
UNITED STATES	2.26			2927.0	16.93
Columbus	2.08	18	-1	17.3	15.52
BOSTON	2.07	19	-2	51.0	15.43
Cincinnati	2.04	20	-3	17.5	15.22
St. Louis	2.00	21	-4	28.3	14.89
Kansas City	1.88	22	-5	17.3	13.96
Memphis	1.82	23	-6	10.0	13.42
Detroit	1.63	24	-7	36.4	11.96
Buffalo	1.53	25	-8	8.6	11.18
Philadelphia	1.45	26	-9	36.8	10.59
New Orleans	1.43	27	-10	10.8	10.44
Pittsburgh	1.42	28	-11	17.5	10.38
Chicago	1.41	29	-12	47.8	10.30
Los Angeles	1.36	30	-13	60.0	9.94
El Paso	1.29	31	-14	3.1	9.39
Baltimore	1.11	32	-15	14.6	8.03
Cleveland	1.08	33	-16	11.5	7.78
Milwaukee	0.97	34	-17	7.9	6.98
New York	0.47	35	-18	16.4	3.36

Table 8G. Ranking of Metropolitan Areas on Average Annual
Percentage Change in Services Employment;
1983-1990

	AvgAnn % Change	Rank	Rank Rel. to U.S.	Total Change (000'S)	Total % Change
Phoenix	5.13	1	15	77.7	41.93
San Jose	4.70	2	14	79.4	37.95
San Diego	4.20	3	13	70.1	33.35
Houston	4.03	4	12	118.2	31.83
Denver	3.93	5	11	65.3	30.98
Atlanta	3.81	6	10	82.6	29.94
Seattle	3.72	7	9	58.0	29.18
Dallas	3.59	8	8	78.5	28.00
Fort Worth	3.57	9	7	29.7	27.86
Columbus	3.38	10	6	36.7	26.23
Minneapolis-St. Paul	3.33	11	5	77.0	25.81
Washington, DC	3.23	12	4	146.9	24.91
Oklahoma City	3.10	13	3	22.8	23.80
Jacksonville	3.02	14	2	20.0	23.12
San Antonio	2.88	15	1	24.8	22.01
UNITED STATES	2.87			5301.0	21.94
BOSTON	2.85	16	-1	131.4	21.71
San Francisco	2.84	17	-2	66.0	21.62
Kansas City	2.78	18	-3	35.8	21.17
Indianapolis	2.65	19	-4	25.1	20.13
Chicago	2.65	19	-4	153.7	20.11
Los Angeles	2.64	21	-6	218.6	20.00
Cincinnati	2.60	22	-7	30.5	19.70
St. Louis	2.56	23	-8	58.2	19.34
Philadelphia	2.53	24	-9	110.9	19.09
Milwaukee	2.49	25	-10	33.6	18.80
Buffalo	2.48	26	-11	20.1	18.72
El Paso	2.48	26	-11	6.6	18.70
Memphis	2.45	28	-13	19.7	18.48
Detroit	2.31	29	-14	74.4	17.34
New Orleans	2.24	30	-15	26.0	16.76
Cleveland	1.98	31	-16	32.6	14.72
Pittsburgh	1.91	32	-17	35.9	14.13
Baltimore	1.87	33	-18	36.5	13.87
New York	1.86	34	-19	178.9	13.76
Nashville	NA			NA	NA

Table 8H. Ranking of Metropolitan Areas on Average Annual
Percentage Change in Transportation Employment;
1983-1990

	AvgAnn % Change	Rank	Rank Rel. to U.S.	Total Change (000'S)	Total % Change
Phoenix	4.39	1	12	12.0	35.09
San Diego	3.77	2	11	9.5	29.60
Fort Worth	3.32	3	10	6.4	25.70
Denver	3.07	4	9	14.2	23.55
San Antonio	3.03	5	8	4.3	23.24
Seattle	2.95	6	7	12.3	22.57
Houston	2.94	7	6	23.5	22.51
Nashville	2.77	8	5	5.1	21.07
Atlanta	2.73	9	4	20.4	20.77
BOSTON	2.29	10	3	15.8	17.17
Columbus	2.21	11	2	4.4	16.54
Dallas	2.20	12	1	12.6	16.49
UNITED STATES	2.02			797.0	15.00
Memphis	1.98	13	-1	4.2	14.69
Oklahoma City	1.80	14	-2	3.3	13.31
Jacksonville	1.76	15	-3	3.5	13.01
San Jose	1.75	16	-4	3.0	12.93
Minneapolis-St. Paul	1.62	17	-5	7.8	11.91
El Paso	1.45	18	-6	1.1	10.58
Los Angeles	1.40	19	-7	20.8	10.22
St. Louis	1.28	20	-8	6.8	9.29
Chicago	1.09	21	-9	13.3	7.85
Philadelphia	0.94	22	-10	6.6	6.78
New York	0.92	23	-11	18.3	6.63
Milwaukee	0.86	24	-12	2.1	6.21
New Orleans	0.86	24	-12	3.2	6.19
Pittsburgh	0.77	26	-14	2.7	5.49
Cleveland	0.75	27	-15	2.3	5.36
Buffalo	0.72	28	-16	1.1	5.16
Kansas City	0.54	29	-17	2.1	3.87
San Francisco	0.14	30	-18	0.8	0.96
Washington, DC	NA			NA	NA
Detroit	NA			NA	NA
Baltimore	NA			NA	NA
Indianapolis	NA			NA	NA
Cincinnati	NA			NA	NA

Table 9A. Ranking of Metropolitan Areas on Average Annual Percentage Change in Total Non-farm Employment; 1990-2000

	AvgAnn % Change	Rank	Rank Rel. to U.S.	Total Change (000'S)	Total % Change
Phoenix	2.72	1	17	322.5	30.76
Denver	2.06	2	16	238.8	22.56
San Jose	1.96	3	15	222.7	21.43
San Diego	1.85	4	14	232.4	20.16
Houston	1.83	5	13	392.3	19.82
Seattle	1.62	6	12	186.4	17.45
Atlanta	1.60	7	11	256.6	17.22
Fort Worth	1.57	8	10	101.6	16.90
Dallas	1.53	9	9	246.6	16.41
Oklahoma City	1.47	10	7	90.0	15.73
Minneapolis-St. Paul	1.47	10	7	224.1	15.71
Nashville	1.44	12	6	79.2	15.34
BOSTON	1.34	13	5	345.8	14.21
San Antonio	1.33	14	4	85.2	14.14
Jacksonville	1.32	15	3	60.7	13.97
San Francisco	1.26	16	2	151.9	13.29
El Paso	1.23	17	1	29.6	12.98
UNITED STATES	1.22			15382.0	12.90
Washington, DC	1.22	18	-1	290.6	12.86
Columbus	1.12	19	-2	83.3	11.83
Los Angeles	1.11	20	-3	523.1	11.69
Memphis	0.99	21	-4	49.9	10.37
New Orleans	0.95	22	-5	64.8	9.93
Kansas City	0.87	23	-6	73.5	9.08
Cincinnati	0.83	24	-7	62.5	8.66
St. Louis	0.80	25	-8	106.4	8.33
Indianapolis	0.80	25	-8	54.0	8.24
Chicago	0.78	27	-10	262.3	8.04
Milwaukee	0.77	28	-11	59.6	7.94
Buffalo	0.73	29	-12	34.9	7.55
Philadelphia	0.71	30	-13	171.7	7.30
New York	0.66	31	-14	307.3	6.82
Baltimore	0.63	32	-15	76.5	6.44
Pittsburgh	0.50	33	-16	51.1	5.15
Cleveland	0.40	34	-17	39.0	4.03
Detroit	0.37	35	-18	71.3	3.75

Table 9B. Ranking of Metropolitan Areas on Average Annual
Change in Non-farm Employment, Manufacturing Excluded,
1990-2000

	AvgAnn % Change	Rank	Rank Rel. to U.S.	Total Change (000's)	Total % Change
Phoenix	2.76	1	14	279.0	31.25
Denver	2.18	2	13	228.3	24.07
San Jose	2.11	3	12	157.7	23.21
San Diego	1.87	4	11	204.2	20.35
Houston	1.84	5	10	346.7	19.97
Fort Worth	1.72	6	9	88.7	18.59
Atlanta	1.72	7	8	240.7	18.55
Seattle	1.68	8	7	159.3	18.18
Dallas	1.62	9	6	216.7	17.38
Nashville	1.57	10	5	70.3	16.82
Minneapolis	1.50	11	4	181.1	16.08
Oklahoma City	1.43	12	3	77.2	15.28
Jacksonville	1.37	13	2	57.8	14.60
BOSTON	1.35	14	1	276.8	14.38
UNITED STATES	1.34			13,898.0	14.27
San Francisco	1.33	15	-1	147.3	14.12
Columbus	1.31	16	-2	81.9	13.88
San Antonio	1.30	17	-3	74.0	13.80
Los Angeles	1.25	18	-4	462.2	13.21
Washington, D.C.	1.21	19	-5	277.0	12.81
Memphis	1.10	20	-6	48.2	11.58
El Paso	1.04	21	-7	19.8	10.93
Cincinnati	1.03	22	-8	60.3	10.75
Chicago	1.02	23	-9	282.6	10.70
Milwaukee	1.00	24	-10	59.4	10.42
St. Louis	0.99	25	-11	108.0	10.37
Kansas City	0.99	26	-12	70.7	10.34
New Orleans	0.97	27	-13	60.4	10.15
Buffalo	0.96	28	-14	37.9	10.03
Philadelphia	0.90	29	-15	182.5	9.42
Indianapolis	0.87	30	-16	48.1	9.07
New York	0.84	31	-17	349.3	8.77
Baltimore	0.72	32	-18	77.1	7.45
Pittsburgh	0.66	33	-19	55.7	6.77
Cleveland	0.64	34	-20	48.7	6.56
Detroit	0.54	35	-21	78.4	5.49

Table 9C. Ranking of Metropolitan Areas on Average Annual
Change in Non-farm Employment, Services Excluded.
1990-2000

	AvgAnn % Change	Rank	Rank Rel. to U.S.	Total Change (000's)	Total % Change
Phoenix	2.49	1	16	219.2	27.91
Denver	1.74	2	15	147.4	18.84
San Jose	1.68	3	14	136.0	18.12
San Diego	1.64	4	13	154.6	17.72
Houston	1.60	5	12	256.2	17.20
Seattle	1.38	6	11	119.2	14.69
Fort Worth	1.32	7	10	65.4	14.06
Atlanta	1.32	8	9	158.4	14.00
Oklahoma City	1.29	9	8	62.2	13.72
Dallas	1.27	10	7	154.3	13.49
Minneapolis	1.23	11	6	136.3	12.96
Nashville	1.20	12	5	48.7	12.69
BOSTON	1.16	13	4	207.3	12.21
San Antonio	1.12	14	3	54.8	11.78
El Paso	1.08	15	2	21.2	11.39
Jacksonville	1.04	16	1	35.6	10.85
UNITED STATES	0.99			9,313.0	10.38
San Francisco	0.98	17	-1	79.0	10.24
Washington, D.C.	0.82	18	-2	130.1	8.54
Los Angeles	0.80	19	-3	260.8	8.25
Columbus	0.78	20	-4	42.8	8.11
Memphis	0.72	21	-5	26.4	7.43
Indianapolis	0.60	22	-6	31.3	6.19
Kansas City	0.59	23	-7	36.6	6.05
New Orleans	0.58	24	-8	28.3	6.00
Cincinnati	0.57	25	-9	31.1	5.80
St. Louis	0.50	26	-10	46.7	5.08
Chicago	0.41	27	-11	98.2	4.19
Baltimore	0.40	28	-12	36.0	4.06
Buffalo	0.39	29	-13	13.2	3.94
Philadelphia	0.37	30	-14	63.0	3.79
Milwaukee	0.37	31	-15	20.4	3.79
New York	0.33	32	-16	100.9	3.33
Pittsburgh	0.24	33	-17	17.3	2.46
Detroit	0.09	34	-18	12.7	0.91
Cleveland	0.08	35	-19	5.9	0.83

Table 9D. Ranking of Metropolitan Areas on Average Annual
Percentage Change in Finance Employment;
1990-2000

	AvgAnn % Change	Rank	Rank Rel. to U.S.	Total Change (000'S)	Total % Change
Phoenix	3.08	1	11	29.7	35.44
San Diego	2.75	2	10	24.6	31.18
Denver	2.50	3	9	25.0	28.00
San Jose	2.27	4	8	11.3	25.17
Houston	2.08	5	7	33.4	22.88
Seattle	2.00	6	6	18.6	21.93
Atlanta	1.97	7	5	23.5	21.52
San Antonio	1.75	8	4	8.0	18.91
Dallas	1.73	9	3	25.6	18.69
Minneapolis-St.Paul	1.71	10	2	19.3	18.52
BOSTON */	1.69	11	1	31.6	18.29
UNITED STATES	1.68			1360.0	18.17
Oklahoma City	1.67	12	-1	6.9	18.06
Columbus	1.67	12	-1	11.3	17.99
Fort Worth	1.61	14	-3	5.5	17.30
Kansas City	1.49	15	-4	10.2	15.96
Jacksonville	1.45	16	-5	5.8	15.51
Washington, DC	1.43	17	-6	19.7	15.22
Memphis	1.33	18	-7	3.9	14.13
Los Angeles	1.27	19	-8	40.9	13.42
El Paso	1.26	20	-9	1.4	13.33
San Francisco	1.22	21	-10	18.5	12.94
Baltimore	1.21	22	-11	9.7	12.75
Nashville	1.20	23	-12	4.0	12.62
St. Louis	1.19	24	-13	9.8	12.53
Milwaukee	1.17	25	-14	6.9	12.39
Chicago	1.16	26	-15	34.5	12.26
Buffalo	1.15	27	-16	3.2	12.08
New York	1.13	28	-17	74.1	11.89
New Orleans	1.06	29	-18	4.5	11.17
Cincinnati	1.00	30	-19	4.4	10.48
Philadelphia	0.98	31	-20	16.6	10.29
Pittsburgh	0.94	32	-21	5.9	9.85
Indianapolis	0.76	33	-22	3.9	7.85
Cleveland	0.72	34	-23	4.4	7.47
Detroit	0.51	35	-24	5.7	5.22

Table 9E. Ranking of Metropolitan Areas on Average Annual
Percentage Change in Manufacturing Employment;
1990-2000

	AvgAnn % Change	Rank	Rank Rel. to U.S.	Total Change (000'S)	Total % Change
Phoenix	2.50	1	18	43.5	27.96
El Paso	1.92	2	17	9.8	20.90
Oklahoma City	1.77	3	16	12.8	19.13
San Diego	1.74	4	14	28.2	18.85
Houston	1.74	4	14	45.6	18.80
San Jose	1.68	6	13	65.0	18.08
San Antonio	1.57	7	12	11.2	16.89
Minneapolis-St. Paul	1.35	8	11	43.0	14.32
Seattle	1.33	9	10	27.1	14.09
Washington, DC	1.32	10	9	13.6	13.98
BOSTON	1.28	11	8	69.0	13.56
Dallas	1.11	12	7	29.9	11.69
Fort Worth	0.99	13	6	12.9	10.39
Denver	0.92	14	5	10.5	9.55
Nashville	0.87	15	4	8.9	9.04
Atlanta	0.79	16	3	15.9	8.24
New Orleans	0.74	17	2	4.4	7.67
Jacksonville	0.73	18	1	2.9	7.51
UNITED STATES	0.66			1484.0	6.80
Los Angeles	0.61	19	-1	60.9	6.25
Indianapolis	0.46	20	-2	5.9	4.72
San Francisco	0.45	21	-3	4.6	4.64
Memphis	0.26	22	-4	1.7	2.61
Kansas City	0.22	23	-5	2.8	2.22
Cincinnati	0.14	24	-6	2.2	1.37
Columbus	0.12	25	-7	1.4	1.23
Milwaukee	0.01	26	-8	0.2	0.11
Baltimore	-0.04	27	-9	-0.6	-0.39
St. Louis	-0.07	28	-10	-1.6	-0.68
Detroit	-0.15	29	-11	-7.1	-1.50
Philadelphia	-0.26	30	-12	-10.8	-2.60
Pittsburgh	-0.27	31	-13	-4.6	-2.70
Chicago	-0.33	32	-14	-20.3	-3.27
Buffalo	-0.36	33	-15	-3.0	-3.55
Cleveland	-0.44	34	-16	-9.7	-4.31
New York	-0.84	35	-17	-42.0	-8.05

Table 9F. Ranking of Metropolitan Areas on Average Annual
Percentage Change in Retail Trade Employment;
1990-2000

	AvgAnn % Change	Rank	Rank Rel. to U.S.	Total Change (000'S)	Total % Change
Phoenix	2.87	1	15	66.2	32.76
San Diego	2.26	2	14	48.5	25.10
Denver	2.04	3	12	39.9	22.42
Nashville	2.04	3	12	20.5	22.36
San Jose	2.00	5	11	29.6	21.89
Atlanta	1.94	6	10	55.8	21.22
Fort Worth	1.88	7	9	25.9	20.46
Houston	1.80	8	8	62.1	19.50
Oklahoma City	1.74	9	7	20.2	18.77
Seattle	1.70	10	6	34.3	18.39
San Francisco	1.66	11	5	31.3	17.91
Dallas	1.60	12	4	43.3	17.19
Jacksonville	1.50	13	3	12.3	16.02
San Antonio	1.47	14	2	17.5	15.68
Minneapolis-St. Paul	1.45	15	1	39.0	15.49
UNITED STATES	1.43			3088.0	15.28
BOSTON	1.32	16	-1	53.6	14.05
Memphis	1.32	17	-2	11.8	13.96
Washington, DC	1.31	18	-3	46.3	13.92
St. Louis	1.14	19	-4	26.3	12.05
New Orleans	1.11	20	-5	13.3	11.65
Cincinnati	1.11	20	-5	15.4	11.62
Kansas City	1.09	22	-7	16.1	11.40
Columbus	1.06	23	-8	14.3	11.10
Buffalo	1.00	24	-9	8.9	10.41
El Paso	0.98	25	-10	3.7	10.25
Indianapolis	0.97	26	-11	12.3	10.16
Chicago	0.97	26	-11	51.6	10.08
Los Angeles	0.95	28	-13	66.0	9.94
Philadelphia	0.84	29	-14	33.4	8.69
Milwaukee	0.76	30	-15	9.5	7.85
Pittsburgh	0.72	31	-16	13.8	7.42
Baltimore	0.65	32	-17	13.2	6.72
Detroit	0.57	33	-18	19.8	5.81
Cleveland	0.56	34	-19	9.2	5.77
New York	0.48	35	-20	24.6	4.87

Table 9G. Ranking of Metropolitan Areas on Average Annual
Percentage Change in Services Employment;
1990-2000

	AvgAnn % Change	Rank	Rank Rel. to U.S.	Total Change (000'S)	Total % Change
Phoenix	3.37	1	16	103.3	39.28
Denver	2.90	2	15	91.4	33.10
San Jose	2.66	3	14	86.7	30.04
Houston	2.48	4	12	136.1	27.80
San Diego	2.48	4	12	77.8	27.76
Atlanta	2.45	6	11	98.2	27.39
Fort Worth	2.38	7	10	36.2	26.56
Seattle	2.35	8	9	67.2	26.17
Dallas	2.32	9	8	92.3	25.72
Jacksonville	2.14	10	7	25.1	23.57
Oklahoma City	2.13	11	6	27.8	23.44
Minneapolis-St. Paul	2.12	12	5	87.8	23.39
Nashville	2.09	13	3	30.5	23.00
Columbus	2.09	13	3	40.5	22.93
San Antonio	2.02	15	2	30.4	22.11
Washington, DC	1.99	16	1	160.5	21.79
UNITED STATES	1.89			6069.0	20.60
New Orleans	1.85	17	-1	36.5	20.15
El Paso	1.84	18	-2	8.4	20.05
Los Angeles	1.84	18	-2	262.3	20.00
San Francisco	1.81	20	-4	72.9	19.63
BOSTON	1.74	21	-5	138.5	18.80
Memphis	1.72	22	-6	23.5	18.61
Milwaukee	1.71	23	-7	39.2	18.46
Kansas City	1.67	24	-8	36.9	18.01
Chicago	1.66	25	-9	164.1	17.88
Buffalo	1.58	26	-10	21.7	17.02
Cincinnati	1.58	26	-10	31.4	16.95
St. Louis	1.55	28	-12	59.7	16.62
Philadelphia	1.47	29	-13	108.7	15.71
Indianapolis	1.42	30	-14	22.7	15.15
New York	1.31	31	-15	206.4	13.95
Baltimore	1.28	32	-16	40.5	13.51
Cleveland	1.23	33	-17	33.1	13.03
Pittsburgh	1.11	34	-18	33.8	11.66
Detroit	1.11	34	-18	58.6	11.64

Table 9H. Ranking of Metropolitan Areas on Average Annual
Percentage Change in Transportation Employment;
1990-2000

	AvgAnn % Change	Rank	Rank Rel. to U.S.	Total Change (000'S)	Total % Change
Phoenix	2.94	1	15	15.5	33.55
Denver	2.40	2	14	19.9	26.71
San Diego	2.22	3	13	10.2	24.52
Seattle	1.96	4	12	14.3	21.41
Fort Worth	1.82	5	10	6.2	19.81
San Antonio	1.82	5	10	4.5	19.74
Houston	1.68	7	8	23.2	18.14
Nashville	1.68	7	8	5.3	18.09
Atlanta	1.61	9	7	20.6	17.37
Washington, DC	1.47	10	6	15.3	15.74
San Jose	1.46	11	5	4.1	15.65
Jacksonville	1.45	12	4	4.7	15.46
BOSTON	1.42	13	3	16.3	15.12
Dallas	1.37	14	2	13.0	14.61
Oklahoma City	1.34	15	1	4.0	14.23
UNITED STATES	1.33			864.0	14.14
Los Angeles	1.28	16	-1	30.4	13.55
Memphis	1.27	17	-2	4.4	13.41
Columbus	1.25	18	-3	4.1	13.23
Indianapolis	1.08	19	-4	4.2	11.32
Minneapolis-St. Paul	1.02	20	-5	7.8	10.64
Baltimore	0.84	21	-6	6.0	8.72
El Paso	0.76	22	-7	0.9	7.83
New Orleans	0.74	23	-8	4.2	7.65
Cincinnati	0.72	24	-9	2.7	7.40
Philadelphia	0.71	25	-10	7.6	7.31
Milwaukee	0.70	26	-11	2.6	7.24
San Francisco	0.67	27	-12	5.8	6.86
Chicago	0.66	28	-13	12.5	6.84
St. Louis	0.61	29	-14	5.0	6.25
New York	0.58	30	-15	17.6	5.98
Pittsburgh	0.56	31	-16	3.0	5.78
Buffalo	0.52	32	-17	1.2	5.36
Cleveland	0.33	33	-18	1.5	3.32
Detroit	0.26	34	-19	2.2	2.62
Kansas City	0.23	35	-20	1.3	2.31

SECTION FOUR. EMPLOYMENT TO POPULATION RATIOS

All metro areas in the study are projected to have a higher employment to population ratio by 2000 than in 1983. This is also true for the nation as a whole where this ratio will grow from 45.68 percent in 1983 to 55.51 percent in 2000.

Across all metro areas, employment to population ratios for 2000 will range from a low of 46.16 percent for Detroit to a high of 83.35 percent for San Francisco (table 10 and 11). Corresponding figures for 1983 were 39.55 percent for El Paso, and 66.37 percent for San Francisco. By 2000, the four metro areas with the highest employment to population ratio after San Francisco will be, respectively, San Jose, Denver, Dallas and Boston. The ratio for the Boston metro area will grow from 56.21 percent in 1983 to 70.74 percent in 2000. In addition to having the highest projected employment to population ratios in 2000, San Jose, San Francisco and Denver will have experienced the highest percentage point increase in this ratio between 1983 and 2000. Their employment ratios will have increased by 23.35 points, 16.98 points and 16.94 points respectively. Conversely, the metro areas which will show small increases in their employment to population ratios are those which also had among the lowest ratios in 1983. They include: Detroit, Pittsburgh, Buffalo, Philadelphia, New Orleans, St. Louis and Chicago.

Table 10. Employment to Population Ratio in Metropolitan Areas.
2000 and 1983

	2000 %	1983 %	Rank in 2000	Rank in 1983
Atlanta	66.09	53.72	10	8
Baltimore	55.06	48.90	28	19
BOSTON	70.74	56.21	5	5
Buffalo	49.33	42.74	32	32
Chicago	57.94	48.59	22	21
Cincinnati	55.90	45.77	27	28
Cleveland	56.72	47.90	24	23
Columbus	59.92	48.61	16	20
Dallas	72.64	58.50	4	3
Denver	72.87	55.93	3	6
Detroit	46.16	39.64	35	34
El Paso	47.67	39.55	34	35
Fort Worth	57.71	45.84	23	27
Houston	64.41	50.38	13	14
Indianapolis	59.80	49.34	17	17
Jacksonville	58.70	49.21	18	18
Kansas City	58.47	50.12	19	15
Los Angeles	60.65	51.14	14	11
Memphis	56.13	47.01	26	24
Milwaukee	58.09	49.38	21	16
Minneapolis	68.94	54.88	7	7
Nashville	64.72	50.99	11	12
New Orleans	53.27	45.62	30	29
New York	58.32	50.76	20	13
Oklahoma City	64.47	51.56	12	10
Philadelphia	52.55	45.12	31	31
Phoenix	66.68	46.99	8	25
Pittsburgh	48.00	41.87	33	33
St. Louis	56.50	48.05	25	22
San Antonio	54.45	45.32	29	30
San Diego	60.13	46.29	15	26
San Francisco	83.35	66.37	1	1
San Jose	82.69	59.34	2	2
Seattle	66.18	52.16	9	9
Washington, DC	70.37	58.31	6	4
United States	55.51	45.68		

Note: This ratio takes total employment over
population in each metropolitan area.

Table 11. Employment and Population Levels. 2000 and 1983
(in thousands)

	Employment 2000	Employment 1983	Population 2000	Population 1983
Atlanta	1,756.0	1,238.3	3,031.5	2,305.0
Baltimore	1,272.5	1,091.6	2,390.0	2,232.2
BOSTON	2,784.7	2,064.9	4,301.3	3,673.4
Buffalo	501.2	428.2	1,045.8	1,001.8
Chicago	3,528.1	2,973.0	6,130.6	6,119.0
Cincinnati	791.6	642.9	1,435.0	1,404.5
Cleveland	1,010.6	899.4	1,723.2	1,877.5
Columbus	798.8	613.8	1,411.4	1,262.6
Dallas	1,757.4	1,269.6	2,712.3	2,170.2
Denver	1,301.6	873.4	2,108.5	1,561.5
Detroit	1,986.5	1,723.4	4,265.4	4,347.4
El Paso	258.6	201.9	590.4	510.5
Fort Worth	707.8	502.3	1,371.6	1,095.8
Houston	2,378.1	1,592.7	4,262.1	3,161.4
Indianapolis	718.5	583.2	1,228.4	1,182.0
Jacksonville	498.1	380.3	942.4	772.8
Kansas City	895.6	734.0	1,599.7	1,464.4
Los Angeles	5,004.3	3,998.2	8,870.2	7,818.3
Memphis	537.2	437.3	1,007.3	930.3
Milwaukee	815.1	690.0	1,424.7	1,397.3
Minneapolis	1,668.5	1,211.8	2,688.6	2,207.9
Nashville	610.2	447.7	1,034.7	878.0
New Orleans	718.8	600.2	1,408.3	1,315.7
New York	4,813.9	4,207.9	8,433.2	8,290.6
Oklahoma City	669.8	493.5	1,138.4	957.1
Philadelphia	2,540.9	2,147.7	4,914.2	4,760.0
Phoenix	1,380.8	781.9	2,573.0	1,663.8
Pittsburgh	1,049.7	920.2	2,163.2	2,197.9
St. Louis	1,397.7	1,151.4	2,537.5	2,396.5
San Antonio	692.9	529.7	1,389.7	1,168.8
San Diego	1,398.4	932.9	2,652.3	2,015.2
San Francisco	1,297.3	1,007.4	1,633.5	1,517.9
San Jose	1,266.5	806.8	1,716.7	1,359.7
Seattle	1,261.7	875.0	2,163.8	1,677.4
Washington, DC	2,562.5	1,964.9	3,948.0	3,369.6
United States	138,338.0	106,891.0	267,464.0	233,975.0

SECTION FIVE. PER CAPITA PERSONAL INCOME

Per capita personal income provides some comparative information on how metropolitan areas will fare economically. Caution must be used in comparing personal income figures because dollar levels also reflect the differential in cost of living across metropolitan areas. Table 12 presents per capita personal income levels in 1983 and 2000, each metro area's relative ranking in both years, and the ranking of areas on the percent change in per capita personal income from 1983 to 2000. Large metropolitan areas tend to have higher personal income than the national average. In 1983, 28 metro areas in the study were above the national per capita income; this will also be true in 2000 when 27 metros will be above the national average.

Among the 35 metro areas in the study, the Boston metro area ranks 4th in 2000, with \$19,049 per capita, as opposed to 5th in 1983 with \$14,296. In 2000, metro areas with per capita personal income above Boston's will be San Francisco with \$24,906, San Jose with \$21,121, and Washington, DC with \$20,735. From 1983 to 2000, the metro areas with the fastest growing per capita income will be among those with low absolute levels of income, with the exception of San Francisco which will have a high, and fast growing, level of per capita personal income. The metro areas with the fastest growing per capita income include Cincinnati, Nashville, Indianapolis, San Francisco and Phoenix.

Table 12. Per Capita Personal Income, 2000 and 1983
(1983 Dollars)

	2000	1983	% Change	2000 Rank	1983 Rank	Rank on 83-2000 % Change
Atlanta	16,622	12,491	35.5	20	20	15
Baltimore	16,184	12,254	32.1	26	23	21
BOSTON	19,049	14,296	33.2	4	5	18
Buffalo	14,907	11,398	30.8	31	30	27
Chicago	17,695	13,457	31.5	10	11	23
Cincinnati	16,590	11,778	40.9	21	27	1
Cleveland	18,128	13,102	38.3	7	14	6
Columbus	15,670	11,445	36.9	29	29	10
Dallas	18,585	14,221	30.7	6	6	28
Denver	18,735	14,503	29.2	5	4	30
Detroit	17,158	12,536	36.9	16	19	11
El Paso	11,445	8,290	38.1	35	35	7
Fort Worth	17,167	13,104	31.0	15	13	25
Houston	18,034	13,655	32.1	9	10	22
Indianapolis	16,582	11,859	39.8	22	25	3
Jacksonville	14,902	11,148	33.7	32	31	17
Kansas City	16,184	12,654	27.9	25	18	32
Los Angeles	17,088	13,416	27.4	18	12	33
Memphis	14,463	10,590	36.6	33	33	12
Milwaukee	17,656	13,000	35.8	11	15	14
Minneapolis	17,549	13,781	27.3	12	9	34
Nashville	15,454	11,058	39.8	30	32	2
New Orleans	16,097	11,707	37.5	27	28	9
New York	17,376	13,809	25.8	13	8	35
Oklahoma City	17,114	12,427	37.7	17	21	8
Philadelphia	17,257	12,701	35.9	14	17	13
Phoenix	16,308	11,780	38.5	24	26	5
Pittsburgh	15,676	11,921	31.5	28	24	24
St. Louis	16,631	12,709	30.9	19	16	26
San Antonio	14,085	10,569	33.2	34	34	19
San Diego	16,454	12,271	34.1	23	22	16
San Francisco	24,906	17,876	39.3	1	1	4
San Jose	21,121	15,853	33.2	2	3	20
Seattle	18,096	13,954	29.7	8	7	29
Washington, DC	20,785	16,174	28.5	3	2	31
United States	15,740	11,686	34.7			

Source: U.S. Department of Commerce, Bureau of Economic Analysis.
Metropolitan Statistical Area Projections to the Year 2000.
Supplemental Data for the December 3, 1985 Press Release.

Appendix A

Methodology used for the OBERS projections

National employment projections are based on the work of the Bureau of Labor Statistics which makes detailed projections of employment by industry. For the states, employment and earnings by industry are projected within a framework of corresponding national totals by industry. There are two phases to the state projection procedure. In the first phase, preliminary projections are generated based on historical mathematical relationships among variables. The growth of employment in each industry in each state is a function of (1) the projected growth of employment in the industry nationally, and (2) projections of the ratio of total employment in the industry in the state to the employment required to meet the intrastate demand for the industry's product. In the second phase, the preliminary projections are reviewed and modified to reflect state-specific economic trends and events not easily reflected in mathematical relationships.¹⁵

State projections are then distributed among Metropolitan Statistical Areas. As with the state projections, the metro areas projections occur in two phases.¹⁶ Preliminary projection

¹⁵ Kenneth P. Johnson and Howard L. Friedenberg, "Regional and State Projections of Income, Employment, and Population to the Year 2000, Survey of Current Business, May 1985, pp.39-63.

¹⁶ The following discussion is based on "Metropolitan Area Projections Procedure," in 1985 OBERS-BEA Regional Projections, vol.2: Metropolitan Statistical Area Projections to 2035, U.S. Department of Commerce, 1985, pp.vii-viii.

based on a mathematical model are modified, in the second phase, to account for metropolitan area economic trends and events not reflected in mathematical relationships.

The allocation of projected state employment to metropolitan areas occurs in the following way. Historical employment estimates are used to compute each metropolitan area's share of state employment in each industry. An estimate of the historical average annual growth rate in the metro area's share of state employment in each industry is obtained from historical data.¹⁷ Then, the projections of metropolitan shares of state employment are based on dampened extensions of the historical average annual growth rate in the metro share.¹⁸ This projected decrease of the average annual growth rate of the shares assumes that self-limiting forces tend to preclude a metropolitan share from growing or declining at a high rate for extended periods of time. The projections for the metropolitan shares are then multiplied

¹⁷ The procedure is as follows:

- (1) The metro areas shares of state employment in 1969 and 1973 are averaged;
- (2) the metro shares of state employment in 1979 and 1983 are averaged;
- (3) the ratio of the second average to the first average is used to estimate the historical average annual growth rate in metro areas shares.

From: "Metropolitan Area Projections Procedure," 1985 OBERS, BEA Regional Projections, Vol. 2: Metropolitan Statistical Area Projections to 2035, p.vii.

¹⁸ The rate for 1983-85 is projected to equal 90 percent of the historical average annual growth rate; that for 1985-90 is projected to equal 80 percent of the 1983-85 average annual growth rate; and the average annual growth rate for each succeeding 5-year period is projected to equal 80 percent of the rate for the preceding 5-year period.

by the projected state employment by industry to obtain preliminary metropolitan employment-projections by industry.

The preliminary projections are then modified if needed to account for: unusually rapid growth or decline; permanent events such as a plant shutdown that affect the level, and not the trend, of economic activity; a temporary event that affects neither the trend nor the projected level of economic activity; and a planned event, such as the opening of a facility after 1983, not yet reflected in historical employment estimates. Once all adjustments are made, the resulting metropolitan shares of state employment by industry for each year of projections are constrained to sum to 100 percent. The final shares obtained are multiplied by projected state employment to obtain the final metropolitan employment projections by industry.

Appendix B

EMPLOYMENT LEVELS IN METROPOLITAN AREAS

	2000	1990	1983
Total Employment	1,756.0	1,499.2	1,238.3
Farm	9.1	8.8	8.5
Nonfarm	1,746.9	1,490.3	1,229.8
Private	1,533.6	1,286.7	1,033.5
Agricultural Services, For., Fish. and oth.	11.3	8.2	NA
Mining	1.4	1.3	NA
Construction	98.7	88.0	NA
Manufacturing	208.9	193.0	164.2
Nondurable Goods	93.5	92.1	83.5
Durable Goods	115.4	100.9	80.7
Transportation and Public Utilities	139.2	118.6	98.2
Wholesale Trade	165.8	147.0	NA
Retail Trade	318.8	263.0	209.1
Finance, Insurance and Real Estate	132.7	109.2	86.4
Services	456.7	358.5	275.9
Government and Government Services	213.3	203.6	196.3
Federal, Civilian	37.6	36.6	35.5
Federal, Military	23.9	23.9	23.9
State and Local	151.9	143.2	137.0

Table 13B. Employment Levels by Sector for the Baltimore Metropolitan Area, 1983, 1990
(in thousands)

	2000	1990	1983
Total Employment	1,272.5	1,196.2	1,091.6
Farm	8.9	9.1	9.1
Nonfarm	1,263.6	1,187.1	1,082.6
Private	995.2	921.1	826.6
Agricultural Services, For., Fish. and oth.	8.9	6.9	NA
Mining	0.1	0.2	NA
Construction	64.7	63.1	56.2
Manufacturing	151.4	152.0	136.8
Nondurable Goods	59.5	61.5	59.7
Durable Goods	91.9	90.5	77.1
Transportation and Public Utilities	74.8	68.8	NA
Wholesale Trade	59.7	58.0	56.3
Retail Trade	209.6	196.4	181.8
Finance, Insurance and Real Estate	85.8	76.1	65.9
Services	340.2	299.7	263.2
Government and Government Services	268.4	266.0	256.0
Federal, Civilian	79.2	77.6	77.0
Federal, Military	31.2	31.2	31.2
State and Local	158.0	157.2	147.8

Table 100. Employment Levels by Sector for the Boston Metropolitan Area, 1983, 1990 and 2000
(In thousands)

	2000	1990	1983
Total Employment	2,784.7	2,439.1	2,064.9
Farm	4.9	5.2	5.4
Nonfarm	2,779.8	2,434.0	2,059.6
Private	2,489.9	2,150.2	1,781.2
Agricultural Services, For., Fish. and oth.	18.0	13.8	NA
Mining	1.2	1.0	0.8
Construction	107.4	96.2	74.6
Manufacturing	578.0	509.0	410.6
Nondurable Goods	122.1	125.1	121.8
Durable Goods	455.9	383.8	288.8
Transportation and Public Utilities	124.1	107.8	92.0
Wholesale Trade	146.3	131.4	115.2
Retail Trade	435.2	381.6	330.6
Finance, Insurance and Real Estate*/	204.4	172.8	135.7
Services	875.2	736.7	605.3
Government and Government Services	289.9	283.8	278.3
Federal, Civilian	46.4	45.8	45.0
Federal, Military	30.5	30.5	30.5
State and Local	213.0	207.4	202.8

Table 13D. Employment Levels by Sector for the Buffalo Metropolitan Area, 1983, 1990 and 2000
(In thousands)

	2000	1990	1983
Total Employment	501.2	466.3	428.2
Farm	3.9	3.9	3.7
Nonfarm	497.3	462.4	424.5
Private	432.8	396.1	352.7
Agricultural Services, For., Fish. and oth.	2.2	1.8	1.4
Mining	1.2	1.0	0.7
Construction	21.4	19.4	15.0
Manufacturing	81.4	84.4	81.6
Nondurable Goods	30.1	30.7	29.4
Durable Goods	51.3	53.6	52.2
Transportation and Public Utilities	23.6	22.4	21.3
Wholesale Trade	29.7	27.6	25.2
Retail Trade	94.4	85.5	76.9
Finance, Insurance and Real Estate	29.7	26.5	23.1
Services	149.2	127.5	107.4
Government and Government Services	64.5	66.4	71.8
Federal, Civilian	8.5	8.5	8.4
Federal, Military	2.5	2.5	2.5
State and Local	53.5	55.4	61.0

Table 13E. Employment Levels by Sector for the Chicago Metropolitan Area, 1983, 1990 and 2000
(in thousands)

	2000	1990	1983
Total Employment	3,528.1	3,266.1	2,973.0
Farm	3.7	4.0	4.2
Nonfarm	3,524.4	3,262.1	2,968.8
Private	3,135.8	2,883.6	2,583.3
Agricultural Services, For., Fish. and oth.	16.0	12.8	NA
Mining	1.8	2.1	NA
Construction	127.7	120.6	103.3
Manufacturing	601.2	621.5	593.1
Nondurable Goods	224.1	237.2	242.8
Durable Goods	377.1	384.4	350.3
Transportation and Public Utilities	195.2	182.7	169.4
Wholesale Trade	232.5	232.9	230.2
Retail Trade	563.5	511.9	464.1
Finance, Insurance and Real Estate	315.8	281.3	247.5
Services	1,082.0	917.9	764.2
Government and Government Services	388.6	378.5	385.5
Federal, Civilian	54.5	55.2	56.7
Federal, Military	17.3	17.3	17.3
State and Local	316.8	306.0	311.5

Table 13F. Employment Levels by Sector for the Cincinnati Metropolitan Area, 1983, 1990 and 2000
(in thousands)

	2000	1990	1983
Total Employment	791.6	729.5	642.9
Farm	7.3	7.6	7.7
Nonfarm	784.3	721.8	635.1
Private	699.7	637.5	550.4
Agricultural Services, For., Fish. and oth.	4.0	3.1	NA
Mining	0.5	0.4	NA
Construction	38.7	35.4	28.3
Manufacturing	163.0	160.8	141.7
Nondurable Goods	68.8	68.8	64.2
Durable Goods	94.2	92.0	77.4
Transportation and Public Utilities	39.2	36.5	NA
Wholesale Trade	43.2	41.5	38.0
Retail Trade	147.9	132.5	115.0
Finance, Insurance and Real Estate	46.4	42.0	36.4
Services	216.7	185.3	154.8
Government and Government Services	84.6	84.3	84.7
Federal, Civilian	11.4	12.0	12.6
Federal, Military	4.7	4.7	4.7
State and Local	68.5	67.6	67.5

Table 10G. Employment Levels by Sector for the Cleveland Metropolitan Area, 1983, 1990 and 2000
(In thousands)

	2000	1990	1983
Total Employment	1,010.6	971.8	899.4
Farm	3.8	4.1	4.2
Nonfarm	1,006.7	967.7	895.3
Private	890.9	850.2	774.7
Agricultural Services, For., Fish. and oth.	5.5	4.5	3.4
Mining	1.1	1.2	1.2
Construction	42.3	39.7	33.4
Manufacturing	215.5	225.2	209.7
Nondurable Goods	65.1	66.9	64.2
Durable Goods	150.4	158.3	145.6
Transportation and Public Utilities	46.7	45.2	42.9
Wholesale Trade	60.8	62.0	61.5
Retail Trade	168.6	159.4	147.9
Finance, Insurance and Real Estate	63.3	58.9	53.3
Services	287.1	254.0	221.4
Government and Government Services	115.8	117.6	120.6
Federal, Civilian	19.1	19.5	19.6
Federal, Military	5.4	5.4	5.4
State and Local	91.3	92.7	95.5

Table 13H. Employment Levels by Sector for the Columbus Metropolitan Area, 1983, 1990 and 2000
(in thousands)

	2000	1990	1983
Total Employment	798.8	716.1	613.8
Farm	11.4	12.0	12.2
Nonfarm	787.4	704.1	601.7
Private	668.8	586.7	486.6
Agricultural Services, For., Fish. and oth.	8.1	6.1	NA
Mining	1.2	1.3	NA
Construction	33.9	30.4	24.0
Manufacturing	115.4	114.0	99.7
Non-durable Goods	43.0	41.1	35.7
Durable Goods	72.4	72.9	64.0
Transportation and Public Utilities	35.1	31.0	26.6
Wholesale Trade	40.6	35.8	30.1
Retail Trade	143.1	128.8	111.5
Finance, Insurance and Real Estate	74.1	62.8	49.5
Services	217.1	176.6	139.9
Government and Government Services	118.6	117.4	115.1
Federal, Civilian	13.5	14.0	14.5
Federal, Military	4.0	4.0	4.0
State and Local	101.1	99.4	96.7

Table 131. Employment Levels by Sector for the Dallas Metropolitan Area, 1983, 1990 and 2000
(In thousands)

	2000	1990	1983
Total Employment	1757.4	1511.3	1269.6
Farm	8.2	8.8	10.0
Nonfarm	1749.1	1502.5	1259.6
Private	1595.2	1358.6	1121.6
Agricultural Services, For., Fish. and oth.	8.9	6.9	NA
Mining	40.7	33.7	NA
Construction	101.7	93.2	83.5
Manufacturing	285.6	255.7	212.8
Nondurable Goods	84.3	77.6	69.3
Durable Goods	201.3	178.0	143.5
Transportation and Public Utilities	102.0	89.0	76.4
Wholesale Trade	147.3	132.3	114.4
Retail Trade	295.2	251.9	209.7
Finance, Insurance and Real Estate	162.6	137.0	113.5
Services	451.2	358.9	280.4
Government and Government Services	154.0	144.0	138.0
Federal, Civilian	26.5	24.5	22.7
Federal, Military	9.6	9.6	9.6
State and Local	117.9	109.9	105.8

Table 13J. Employment Levels by Sector for the Denver Metropolitan Area, 1983, 1990 and 2000
(in thousands)

	2000	1990	1983
Total Employment	1,301.6	1,062.8	873.4
Farm	4.3	4.4	4.2
Nonfarm	1,297.3	1,058.5	869.3
Private	1,135.1	911.9	731.6
Agricultural Services, For., Fish. and oth.	11.2	7.8	5.2
Mining	41.0	33.7	26.2
Construction	77.4	68.0	56.2
Manufacturing	120.4	109.9	95.0
Nondurable Goods	53.0	48.5	43.8
Durable Goods	67.4	61.4	51.2
Transportation and Public Utilities	94.4	74.5	60.3
Wholesale Trade	91.0	74.5	60.6
Retail Trade	217.9	178.0	147.2
Finance, Insurance and Real Estate Services	114.3	89.3	70.0
Government and Government Services	367.5	276.1	210.8
Federal, Civilian	162.2	146.6	137.7
Federal, Military	33.2	31.7	30.5
State and Local	18.5	18.5	18.5
	110.5	96.4	88.7

Table 11K. Employment Levels by Sector for the Detroit Metropolitan Area, 1983, 1990 and 2000
(in thousands)

	2000	1990	1983
Total Employment	1,986.5	1,915.9	1,723.4
Farm	11.4	12.1	13.3
Nonfarm	1,975.1	1,903.8	1,710.1
Private	1,756.6	1,676.9	1,476.8
Agricultural Services, For., Fish. and oth.	9.6	8.1	NA
Mining	1.5	1.3	NA
Construction	68.8	67.6	NA
Manufacturing	467.7	474.8	421.2
Nondurable Goods	67.5	71.8	73.8
Durable Goods	400.2	403.0	347.4
Transportation and Public Utilities	86.2	84.0	NA
Wholesale Trade	85.3	87.8	85.0
Retail Trade	360.5	340.7	304.3
Finance, Insurance and Real Estate	114.9	109.2	97.5
Services	562.0	503.4	429.0
Government and Government Services	218.5	226.9	233.3
Federal, Civilian	30.9	31.5	31.6
Federal, Military	11.2	11.2	11.2
State and Local	176.4	184.2	190.5

Table 13L. Employment Levels by Sector for the El Paso Metropolitan Area, 1983, 1990 and 2000
(in thousands)

	2000	1990	1983
Total Employment	258.6	229.1	201.9
Farm	1.0	1.1	1.4
Nonfarm	257.6	228.0	200.6
Private	197.7	171.0	145.4
Agricultural Services, For., Fish. and oth.	1.2	0.9	0.6
Mining	0.6	0.5	0.4
Construction	12.5	11.4	10.2
Manufacturing	56.7	46.9	36.3
Nondurable Goods	31.3	28.0	24.2
Durable Goods	25.4	18.9	12.1
Transportation and Public Utilities	12.4	11.5	10.4
Wholesale Trade	12.5	11.4	10.2
Retail Trade	39.8	36.1	33.0
Finance, Insurance and Real Estate Services	11.9	10.5	9.0
Government and Government Services	50.3	41.9	35.3
Federal, Civilian	59.9	57.0	55.1
Federal, Military	9.2	8.8	8.7
State and Local	20.0	20.0	20.0
	30.8	28.3	26.5

Table 13M. Employment Levels by Sector for the Fort Worth Metropolitan Area, 1983, 1990 and 2000
(In thousands)

	2000	1990	1983
Total Employment	707.8	606.4	502.3
Farm	4.9	5.1	5.7
Nonfarm	702.9	601.3	496.6
Private	629.5	532.2	430.0
Agricultural Services, For., Fish. and oth.	4.6	3.5	NA
Mining	6.7	5.9	NA
Construction	42.1	38.1	33.3
Manufacturing	137.0	124.1	101.6
Nondurable Goods	37.3	33.3	28.3
Durable Goods	99.7	90.8	73.3
Transportation and Public Utilities	37.5	31.3	24.9
Wholesale Trade	39.2	34.5	29.0
Retail Trade	152.5	126.6	100.5
Finance, Insurance and Real Estate	37.3	31.8	26.5
Services	172.5	136.3	106.6
Government and Government Services	73.4	69.1	66.6
Federal, Civilian	12.5	11.9	11.7
Federal, Military	9.0	9.0	9.0
State and Local	51.9	48.2	45.9

Table 13N. Employment Levels by Sector for the Houston Metropolitan Area, 1983, 1990 and 2000
(in thousands)

	2000	1990	1983
Total Employment	2,378.1	1,986.2	1,592.7
Farm	6.9	7.3	8.4
Nonfarm	2,371.2	1,978.9	1,584.4
Private	2,150.5	1,777.4	1,398.5
Agricultural Services, For., Fish. and oth.	12.4	9.8	7.3
Mining	142.5	120.5	96.4
Construction	202.7	176.3	144.6
Manufacturing	288.1	242.5	183.9
Non-durable Goods	108.8	96.9	81.9
Durable Goods	179.4	145.6	101.9
Transportation and Public Utilities	151.1	127.9	104.4
Wholesale Trade	168.1	146.5	120.4
Retail Trade	380.6	318.5	256.4
Finance, Insurance and Real Estate	179.4	146.0	113.9
Services	625.6	489.5	371.3
Government and Government Services	220.7	201.5	185.9
Federal, Civilian	25.4	23.6	22.2
Federal, Military	12.2	12.2	12.2
State and Local	183.1	165.7	151.5

Table 130. Employment Levels by Sector for the Indianapolis Metropolitan Area, 1983, 1990 and 2000
(In thousands)

	2000	1990	1983
Total Employment	718.5	665.4	583.2
Farm	9.4	10.3	10.8
Nonfarm	709.1	655.1	572.4
Private	610.6	557.1	477.2
Agricultural Services, For., Fish. and oth.	4.6	3.4	NA
Mining	1.2	1.1	NA
Construction	34.2	32.0	25.7
Manufacturing	130.9	125.0	108.0
Nondurable Goods	39.0	38.6	36.1
Durable Goods	91.9	86.4	71.9
Transportation and Public Utilities	41.3	37.1	NA
Wholesale Trade	38.8	38.1	35.5
Retail Trade	133.4	121.1	103.2
Finance, Insurance and Real Estate	53.6	49.7	44.1
Services	172.5	149.8	124.7
Government and Government Services	98.6	98.0	95.2
Federal, Civilian	16.8	17.3	17.4
Federal, Military	9.4	9.4	9.4
State and Local	72.4	71.3	68.4

Table 13P. Employment Levels by Sector for the Jacksonville Metropolitan Area, 1983, 1990 and 2000
(in thousands)

	2000	1990	1983
Total Employment	498.1	437.2	380.3
Farm	2.9	2.8	2.3
Nonfarm	495.2	434.5	378.0
Private	404.1	348.2	295.4
Agricultural Services, For., Fish. and oth.	3.0	2.7	NA
Mining	0.6	0.6	NA
Construction	30.1	28.1	23.9
Manufacturing	41.5	38.6	33.4
Nondurable Goods	20.5	19.5	17.9
Durable Goods	21.0	19.1	15.5
Transportation and Public Utilities	35.1	30.4	26.9
Wholesale Trade	29.8	27.0	NA
Retail Trade	89.1	76.8	64.6
Finance, Insurance and Real Estate Services	43.2	37.4	32.4
Government and Government Services	131.6	106.5	86.5
Federal, Civilian	91.1	86.3	82.6
Federal, Military	17.7	16.2	14.9
State and Local	31.9	31.9	31.9
	41.5	38.1	35.8

Table 13Q. Employment Levels by Sector for the Kansas City Metropolitan Area, 1983, 1990 and 2000
(in thousands)

	2000	1990	1983
Total Employment	895.6	823.1	734.0
Farm	12.3	13.3	14.0
Nonfarm	883.3	809.8	720.0
Private	760.8	689.3	601.3
Agricultural Services, For., Fish. and oth.	5.6	4.4	NA
Mining	1.0	0.9	NA
Construction	36.9	35.7	30.4
Manufacturing	128.9	126.1	113.6
Nondurable Goods	51.6	52.0	50.2
Durable Goods	77.3	74.2	63.5
Transportation and Public Utilities	57.6	56.3	54.2
Wholesale Trade	57.7	55.8	52.2
Retail Trade	157.3	141.2	123.9
Finance, Insurance and Real Estate	74.1	63.9	53.7
Services	241.8	204.9	169.1
Government and Government Services	122.5	120.5	118.8
Federal, Civilian	27.5	28.1	28.5
Federal, Military	14.4	14.4	14.4
State and Local	80.6	78.0	75.9

Table 13R. Employment Levels by Sector for the Los Angeles Metropolitan Area, 1983, 1990 and 2000
(in thousands)

	2000	1990	1983
Total Employment	5,004.3	4,481.4	3,998.2
Farm	7.0	7.2	6.9
Nonfarm	4,997.3	4,474.2	3,991.3
Private	4,471.0	3,967.5	3,488.7
Agricultural Services, For., Fish. and oth.	36.6	31.2	26.4
Mining	12.9	12.6	13.3
Construction	144.3	138.1	123.2
Manufacturing	1,036.0	975.1	875.6
·Nondurable Goods	330.0	315.7	293.1
Durable Goods	706.0	659.5	582.5
Transportation and Public Utilities	254.7	224.3	203.5
Wholesale Trade	337.1	306.0	278.9
Retail Trade	729.8	663.8	603.8
Finance, Insurance and Real Estate	345.7	304.8	271.3
Services	1,573.8	1,311.5	1,092.9
Government and Government Services	526.3	506.7	502.6
Federal, Civilian	77.4	73.8	71.0
Federal, Military	37.4	37.4	37.4
State and Local	411.5	395.5	394.2

Table 105. Employment Levels by Sector for the Memphis Metropolitan Area, 1983, 1990 and 2000
(In thousands)

	2000	1990	1983
Total Employment	537.2	487.9	437.3
Farm	5.8	6.4	6.8
Nonfarm	531.3	481.4	430.5
Private	453.0	402.0	350.1
Agricultural Services, For., Fish. and oth.	3.2	2.5	1.8
Mining	0.2	0.3	NA
Construction	25.0	23.3	19.4
Manufacturing	66.8	65.1	59.7
Nondurable Goods	35.5	35.0	33.1
Durable Goods	31.3	30.1	26.6
Transportation and Public Utilities	37.2	32.8	28.6
Wholesale Trade	42.9	39.7	NA
Retail Trade	96.3	84.5	74.5
Finance, Insurance and Real Estate	31.5	27.6	NA
Services	149.8	126.3	106.6
Government and Government Services	78.4	79.4	80.3
Federal, Civilian	17.2	17.5	17.4
Federal, Military	15.1	15.1	15.1
State and Local	46.0	46.9	47.8

Table 13T. Employment Levels by Sector for the Milwaukee Metropolitan Area, 1983, 1990 and 2000
(in thousands)

	2000	1990	1983
Total Employment	815.1	755.6	690.0
Farm	4.7	4.9	5.5
Nonfarm	810.4	750.8	684.4
Private	734.5	674.7	604.2
Agricultural Services, For., Fish. and oth.	3.5	2.8	2.1
Mining	0.5	0.4	NA
Construction	24.8	24.8	NA
Manufacturing	181.2	181.0	164.8
Nondurable Goods	48.4	48.3	47.1
Durable Goods	132.8	132.7	117.8
Transportation and Public Utilities	38.5	35.9	33.8
Wholesale Trade	41.4	40.7	39.8
Retail Trade	130.5	121.0	113.1
Finance, Insurance and Real Estate	62.6	55.7	48.7
Services	251.5	212.3	178.7
Government and Government Services	75.9	76.1	80.3
Federal, Civilian	9.9	9.9	10.2
Federal, Military	7.9	7.9	7.9
State and Local	58.1	58.3	62.2

Table 1311. Employment Levels by Sector for the Minneapolis Metropolitan Area, 1983, 1990 and 2000
(In thousands)

	2000	1990	1983
Total Employment	1,668.5	1,444.7	1,211.8
Farm	17.7	18.0	19.7
Nonfarm	1,650.8	1,426.7	1,192.1
Private	1,477.4	1,262.9	1,036.7
Agricultural Services, For., Fish. and oth.	9.1	7.0	NA
Mining	1.5	1.2	NA
Construction	71.7	62.3	48.3
Manufacturing	343.3	300.3	242.5
Nondurable Goods	110.9	102.2	NA
Durable Goods	232.4	198.1	NA
Transportation and Public Utilities	81.1	73.3	65.5
Wholesale Trade	93.4	87.5	NA
Retail Trade	290.8	251.8	211.0
Finance, Insurance and Real Estate	123.5	104.2	85.9
Services	463.1	375.3	298.3
Government and Government Services	173.4	163.8	155.5
Federal, Civilian	20.7	20.5	19.6
Federal, Military	9.1	9.1	9.1
State and Local	143.7	134.2	126.8

Table 13V. Employment Levels by Sector for the Nashville Metropolitan Area, 1983, 1990 and 2000
(in thousands)

	2000	1990	1983
Total Employment	610.2	531.9	447.7
Farm	14.8	15.6	15.8
Nonfarm	595.5	516.3	431.9
Private	529.1	451.6	368.8
Agricultural Services, For., Fish. and oth.	4.1	3.2	NA
Mining	1.3	1.1	NA
Construction	35.5	31.7	24.7
Manufacturing	107.3	98.4	81.5
Nondurable Goods	41.1	40.5	NA
Durable Goods	66.1	57.9	NA
Transportation and Public Utilities	34.6	29.3	24.2
Wholesale Trade	35.3	31.8	NA
Retail Trade	112.2	91.7	74.2
Finance, Insurance and Real Estate	35.7	31.7	27.3
Services	163.1	132.6	NA
Government and Government Services	66.4	64.7	63.1
Federal, Civilian	9.7	9.7	9.6
Federal, Military	3.9	3.9	3.9
State and Local	52.8	51.1	49.5

Table 13W. Employment Levels by Sector for the New Orleans Metropolitan Area, 1983, 1990 and 2000
(In thousands)

	2000	1990	1983
Total Employment	718.8	654.0	600.2
Farm	1.3	1.3	1.3
Nonfarm	717.5	652.7	598.9
Private	612.7	551.5	499.0
Agricultural Services, For., Fish. and oth.	3.4	3.0	2.3
Mining	16.0	17.9	20.2
Construction	43.6	44.3	40.8
Manufacturing	61.8	57.4	50.8
Nondurable Goods	25.9	25.5	25.0
Durable Goods	35.9	31.9	25.8
Transportation and Public Utilities	59.1	54.9	51.7
Wholesale Trade	38.9	38.4	37.8
Retail Trade	127.5	114.2	103.4
Finance, Insurance and Real Estate	44.8	40.3	36.8
Services	217.6	181.1	155.1
Government and Government Services	104.8	101.1	99.9
Federal, Civilian	15.7	15.1	14.9
Federal, Military	9.2	9.2	9.2
State and Local	79.8	76.8	75.8

Table 13X. Employment Levels by Sector for the New York Metropolitan Area, 1983, 1990 and 2000
(in thousands)

	2000	1990	1983
Total Employment	4,813.9	4,506.6	4,207.9
Farm	0.9	0.9	0.8
Nonfarm	4,813.1	4,505.8	4,207.1
Private	4,221.7	3,910.5	3,589.4
Agricultural Services, For., Fish. and oth.	16.0	13.8	NA
Mining	3.7	3.3	NA
Construction	161.0	151.7	125.5
Manufacturing	480.0	522.0	538.9
Nondurable Goods	321.4	354.0	372.6
Durable Goods	158.6	168.0	166.4
Transportation and Public Utilities	312.1	294.5	276.2
Wholesale Trade	336.4	317.9	298.7
Retail Trade	529.4	504.8	488.4
Finance, Insurance and Real Estate	697.3	623.2	546.8
Services	1,685.8	1,479.4	1,300.5
Government and Government Services	591.4	595.3	617.7
Federal, Civilian	75.2	79.0	84.9
Federal, Military	26.7	26.7	22.7
State and Local	489.5	489.6	510.1

Table 13V. Employment Levels by Sector for the Oklahoma City Metropolitan Area, 1983, 1990 and 2000
(in thousands)

	2000	1990	1983
Total Employment	669.8	580.0	493.5
Farm	7.8	8.0	8.5
Nonfarm	662.0	572.0	485.0
Private	545.8	458.3	372.7
Agricultural Services, For., Fish. and oth.	4.0	2.9	1.8
Mining	34.7	29.0	23.1
Construction	38.3	34.0	27.6
Manufacturing	79.7	66.9	50.3
Nondurable Goods	19.4	18.0	16.4
Durable Goods	60.3	48.8	33.9
Transportation and Public Utilities	32.1	28.1	24.8
Wholesale Trade	37.8	33.2	27.7
Retail Trade	127.8	107.6	89.2
Finance, Insurance and Real Estate Services	45.1	38.2	32.5
Government and Government Services	146.4	118.6	95.8
Federal, Civilian	116.2	113.7	112.4
Federal, Military	28.3	28.3	28.8
State and Local	13.7	13.7	13.7
	74.2	71.7	69.9

Table 13Z. Employment Levels by Sector for the Philadelphia Metropolitan Area, 1983, 1990 and 2000
(in thousands)

	2000	1990	1983
Total Employment	2,540.9	2,369.8	2,147.7
Farm	16.2	16.8	16.5
Nonfarm	2,524.7	2,353.0	2,131.2
Private	2,199.0	2,024.7	1,795.5
Agricultural Services, For., Fish. and oth.	19.2	14.9	NA
Mining	1.1	1.2	NA
Construction	109.7	106.2	89.6
Manufacturing	405.3	416.1	395.8
Nondurable Goods	174.3	184.2	188.7
Durable Goods	231.0	231.9	207.1
Transportation and Public Utilities	111.5	103.9	97.3
Wholesale Trade	156.1	144.9	129.7
Retail Trade	417.7	384.3	347.5
Finance, Insurance and Real Estate	177.9	161.3	142.3
Services	800.5	691.8	580.9
Government and Government Services	325.7	328.3	335.7
Federal, Civilian	69.7	72.3	75.0
Federal, Military	50.9	50.9	50.9
State and Local	205.1	205.1	209.8

Table 10A. Employment Levels by Sector for the Phoenix Metropolitan Area, 1983, 1990 and 2000
(In thousands)

	2000	1990	1983
Total Employment	1,380.8	1,058.3	781.9
Farm	9.8	9.9	9.5
Nonfarm	1,370.9	1,048.4	772.4
Private	1,213.7	911.4	652.3
Agricultural Services, For., Fish. and oth.	20.3	14.1	9.3
Mining	1.5	1.2	0.8
Construction	109.2	87.9	60.8
Manufacturing	199.1	155.6	114.6
Nondurable Goods	37.7	30.8	24.8
Durable Goods	161.4	124.8	89.9
Transportation and Public Utilities	61.7	46.2	34.2
Wholesale Trade	73.8	57.6	42.8
Retail Trade	268.3	202.1	144.9
Finance, Insurance and Real Estate	113.5	83.8	59.6
Services	366.3	263.0	185.3
Government and Government Services	157.2	137.0	120.0
Federal, Civilian	19.5	17.2	14.8
Federal, Military	16.3	16.3	16.3
State and Local	121.4	103.5	89.0

Table 13AB. Employment Levels by Sector for the Pittsburgh Metropolitan Area, 1983, 1990 and 2000
(in thousands)

	2000	1990	1983
Total Employment	1,049.7	999.0	920.2
Farm	5.9	6.2	6.2
Nonfarm	1,043.9	992.8	914.0
Private	935.0	879.4	792.6
Agricultural Services, For., Fish. and oth.	5.8	4.4	3.2
Mining	7.0	7.3	7.7
Construction	57.1	55.6	46.6
Manufacturing	165.7	170.3	159.6
Nondurable Goods	39.8	40.7	39.0
Durable Goods	125.9	129.6	120.6
Transportation and Public Utilities	54.9	51.9	49.2
Wholesale Trade	55.3	53.9	51.3
Retail Trade	199.9	186.1	168.6
Finance, Insurance and Real Estate Services	65.8	59.9	52.5
Government and Government Services	323.7	289.9	254.0
Federal, Civilian	108.8	113.4	121.4
Federal, Military	16.5	17.1	17.6
State and Local	13.9	13.9	13.9
	78.4	82.3	89.8

Table 13AC. Employment Levels by Sector for the St. Louis Metropolitan Area, 1983, 1990 and 2000
(In thousands)

	2000	1990	1983
Total Employment	1,397.7	1,291.9	1,151.4
Farm	13.6	14.2	14.3
Nonfarm	1,384.1	1,277.7	1,137.2
Private	1,228.2	1,119.8	974.3
Agricultural Services, For., Fish. and oth.	7.5	6.1	NA
Mining	5.3	4.6	NA
Construction	72.7	66.9	53.9
Manufacturing	235.1	236.7	216.0
Nondurable Goods	82.0	85.5	85.1
Durable Goods	153.0	151.2	131.0
Transportation and Public Utilities	85.0	80.0	73.2
Wholesale Trade	71.2	69.8	64.9
Retail Trade	244.6	218.3	190.0
Finance, Insurance and Real Estate	88.0	78.2	67.0
Services	418.9	359.2	301.0
Government and Government Services	155.9	157.9	162.9
Federal, Civilian	35.4	36.7	37.8
Federal, Military	21.4	21.4	21.4
State and Local	99.0	99.8	103.7

Table 13AD. Employment Levels by Sector for the San Antonio Metropolitan Area, 1983, 1990 and 2000
(in thousands)

	2000	1990	1983
Total Employment	692.9	607.9	529.7
Farm	5.2	5.4	6.0
Nonfarm	687.7	602.5	523.7
Private	539.3	458.6	380.6
Agricultural Services, For., Fish. and oth.	2.8	2.3	1.7
Mining	4.4	4.0	3.6
Construction	48.2	42.8	36.6
Manufacturing	77.5	66.3	51.8
Nondurable Goods	31.8	29.0	25.3
Durable Goods	45.7	37.3	26.5
Transportation and Public Utilities	27.3	22.8	18.5
Wholesale Trade	31.7	29.1	26.0
Retail Trade	129.1	111.6	94.8
Finance, Insurance and Real Estate Services	50.3	42.3	34.9
Government and Government Services	167.9	137.5	112.7
Federal, Civilian	148.4	143.9	143.1
Federal, Military	38.6	38.1	38.9
State and Local	43.4	43.4	43.4
	66.4	62.4	60.8

Table 13AE. Employment Levels by Sector for the San Diego Metropolitan Area, 1983, 1990 and 2000
(In thousands)

	2000	1990	1983
Total Employment	1,398.4	1,166.3	932.9
Farm	13.1	13.4	12.8
Nonfarm	1,385.3	1,152.9	920.1
Private	1,084.9	864.9	641.2
Agricultural Services, For., Fish. and oth.	19.5	15.3	11.3
Mining	0.7	0.6	0.6
Construction	72.8	58.9	40.8
Manufacturing	177.8	149.6	110.7
Nondurable Goods	30.4	26.5	20.9
Durable Goods	147.5	123.1	89.8
Transportation and Public Utilities	51.8	41.6	32.1
Wholesale Trade	58.8	46.4	32.7
Retail Trade	241.7	193.2	148.3
Finance, Insurance and Real Estate	103.5	78.9	54.5
Services	358.1	280.3	210.2
Government and Government Services	300.4	288.1	278.9
Federal, Civilian	46.2	44.0	42.3
Federal, Military	137.8	137.8	137.7
State and Local	116.4	106.3	98.8

Table 13AF. Employment Levels by Sector for the San Francisco Metropolitan Area, 1983, 1990 and 2000
(in thousands)

	2000	1990	1983
Total Employment	1,297.3	1,145.4	1,007.4
Farm	2.8	2.8	2.7
Nonfarm	1,294.5	1,142.6	1,004.7
Private	1,147.0	1,000.0	861.2
Agricultural Services, For., Fish. and oth.	12.1	9.2	NA
Mining	4.4	3.6	NA
Construction	53.7	47.9	35.1
Manufacturing	103.8	99.2	91.4
Non durable Goods	62.0	59.6	55.7
Durable Goods	41.8	39.6	35.7
Transportation and Public Utilities	90.3	84.5	83.7
Wholesale Trade	71.0	66.4	63.3
Retail Trade	206.1	174.8	149.0
Finance, Insurance and Real Estate	161.5	143.0	124.1
Services	444.2	371.3	305.3
Government and Government Services	147.5	142.6	143.5
Federal, Civilian	33.4	33.7	35.4
Federal, Military	12.2	12.2	12.2
State and Local	101.9	96.7	96.0

Table 13A6. Employment Levels by Sector for the San Jose Metropolitan Area, 1983, 1990 and 2000
(In thousands)

	2000	1990	1983
Total Employment	1,266.5	1,043.9	806.8
Farm	4.8	4.9	4.6
Nonfarm	1,261.7	1,039.0	802.2
Private	1,158.2	943.8	713.7
Agricultural Services, For., Fish. and oth.	9.3	7.4	5.6
Mining	0.3	0.3	0.2
Construction	40.0	35.2	28.2
Manufacturing	424.6	359.6	269.8
Nondurable Goods	28.7	28.6	27.3
Durable Goods	396.0	331.0	242.5
Transportation and Public Utilities	30.3	26.2	23.2
Wholesale Trade	57.3	46.4	34.6
Retail Trade	164.8	135.2	108.9
Finance, Insurance and Real Estate	56.2	44.9	34.0
Services	375.3	288.6	209.2
Government and Government Services	103.5	95.2	88.5
Federal, Civilian	13.9	12.7	11.5
Federal, Military	10.4	10.4	10.4
State and Local	79.2	72.1	66.6

Table 13AH. Employment Levels by Sector for the Seattle Metropolitan Area, 1983, 1990 and 2000
(in thousands)

	2000	1990	1983
Total Employment	1,261.7	1,074.8	875.0
Farm	6.9	6.4	5.5
Nonfarm	1,254.8	1,068.4	869.5
Private	1,103.5	922.4	736.5
Agricultural Services, For., Fish. and oth.	14.9	11.6	8.6
Mining	0.7	0.7	0.6
Construction	62.6	55.3	42.6
Manufacturing	219.4	192.3	154.5
Nondurable Goods	38.3	35.0	30.6
Durable Goods	181.1	157.4	123.9
Transportation and Public Utilities	81.1	66.8	54.5
Wholesale Trade	76.4	67.6	57.5
Retail Trade	220.8	186.5	153.6
Finance, Insurance and Real Estate	103.4	84.8	65.8
Services	324.0	256.8	198.8
Government and Government Services	151.3	146.0	133.0
Federal, Civilian	20.1	19.3	18.8
Federal, Military	22.7	22.7	12.7
State and Local	108.5	104.0	101.5

Table 10A1. Employment Levels by Sector for the Washington, DC Metropolitan Area, 1983, 1990 and 2000
(In thousands)

	2000	1990	1983
Total Employment	2,562.5	2,271.7	1,964.9
Farm	11.9	11.7	11.1
Nonfarm	2,550.6	2,260.0	1,953.8
Private	1,894.5	1,611.4	1,312.2
Agricultural Services, For., Fish. and oth.	20.6	16.0	NA
Mining	2.2	1.8	NA
Construction	127.2	117.5	NA
Manufacturing	110.9	97.3	72.6
Nondurable Goods	51.7	47.2	38.5
Durable Goods	59.2	50.1	34.1
Transportation and Public Utilities	112.5	97.2	NA
Wholesale Trade	96.1	83.0	NA
Retail Trade	379.0	332.7	283.7
Finance, Insurance and Real Estate	149.1	129.4	NA
Services	897.1	736.6	589.7
Government and Government Services	656.1	648.6	641.6
Federal, Civilian	364.5	364.2	365.6
Federal, Military	90.5	90.5	90.5
State and Local	201.0	193.9	185.4

Table 13AJ. Employment Levels by Sector for the United States, 1983, 1990 and 2000
(in thousands)

	2000	1990	1983
Total Employment	138,338.0	123,071.0	106,891.0
Farm	3,755.0	3,870.0	3,904.0
Nonfarm	134,583.0	119,201.0	102,987.0
Private	114,896.0	100,139.0	84,269.0
Agricultural Services, For., Fish. and oth.	1,412.0	1,110.0	830.0
Mining	1,261.0	1,129.0	979.0
Construction	7,020.0	6,325.0	5,098.0
Manufacturing	23,321.0	21,837.0	18,822.0
Nondurable Goods	8,574.0	8,405.0	7,867.0
Durable Goods	14,747.0	13,432.0	10,955.0
Transportation and Public Utilities	6,974.0	6,110.0	5,313.0
Wholesale Trade	7,230.0	6,467.0	5,610.0
Retail Trade	23,299.0	20,211.0	17,284.0
Finance, Insurance and Real Estate Services	8,845.0	7,485.0	6,169.0
Government and Government Services	35,534.0	29,465.0	24,164.0
Federal, Civilian	19,687.0	19,062.0	18,718.0
Federal, Military	3,068.0	3,003.0	2,951.0
State and Local	2,693.0	2,693.0	2,651.0
	13,926.0	13,366.0	13,116.0

